University Hospitals Bristol NHS
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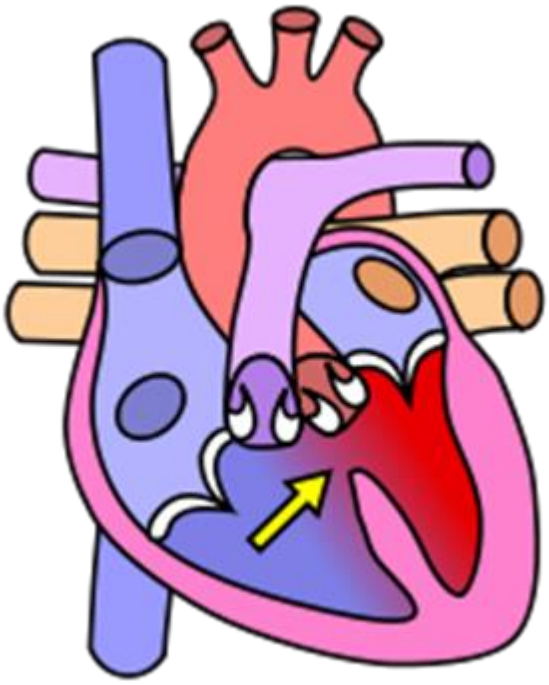
Cardiology
Current Awareness Newsletter
August 2016



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Outreach

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Literature Searching

We provide a literature searching service for any library member. For those embarking on their own research it is advisable to book some time with one of the librarians for a 1 to 1 session where we can guide you through the process of creating a well-focused literature research and introduce you to the health databases access via NHS Evidence.

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We also offer **one-to-one or small group training** in literature searching, accessing electronic journals, and critical appraisal/Statistics. These are essential courses that teach how to interpret clinical papers.

For more information, email: katie.barnard@uhbristol.nhs.uk

Books

Books can be searched for using SWIMS our online catalogue at www.swims.nhs.uk. Books and journals that are not available on site or electronically may be requested from other locations. Please email requests to: library@uhbristol.nhs.uk

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Tables of Contents from relevant journals

If you require full articles please email: library@uhbristol.nhs.uk

Journal of the American College of Cardiology

2016

Circulation

2016

European Heart Journal

June 2016

New Nice Guidance

Evidence-based recommendations on percutaneous endoscopic laser balloon pulmonary vein isolation for atrial fibrillation in adults. This involves destroying the tissue causing atrial fibrillation using laser energy. https://www.nice.org.uk/guidance/ipg563

Latest relevant Systematic Reviews from the Cochrane Library

Drug-eluting balloon angioplasty versus uncoated balloon angioplasty for peripheral arterial disease of the lower limbs Ahmed Kayssi, Talal Al-Atassi, George Oreopoulos, Graham Roche-Nagle, Kong Teng Tan, Dheeraj K Rajan

Laparoscopic surgery for abdominal aortic aneurysm Lindsay Robertson, Sandip Nandhra

Fluvastatin for lowering lipids Stephen P Adams, Sarpreet S Sekhon, James M Wright, Michael Tsang

Unfractioned heparin versus bivalirudin in patients undergoing percutaneous coronary intervention for acute coronary syndrome Nayan K Desai, Richard M Pescatore, Janah Aji

Pharmacological interventions for treating heart failure in patients with Chagas cardiomyopathy Arturo J Martí-Carvajal, Joey SW Kwong

Self-monitoring and self-management of oral anticoagulation Carl J Heneghan, Josep M Garcia-Alamino, Elizabeth A Spencer, Alison M Ward, Rafael Perera, Clare Bankhead, Pablo Alonso-Coello, David Fitzmaurice, Kamal R Mahtani, Igho J Onakpoya

Recent Research from Research Gate

Click here Bristol Heart Institute

UptoDate

http://www.uptodate.com/contents/whats-new-in-cardiovascular-medicine

Nothing to report

UpToDate is the leading evidence-based clinical decision support system, designed for use at the point of care.

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Literature Search

A new topic can be chosen every month/quarter to reflect changes in practice or new developments in any particular field of interest.

This section can be changed.

1. Pericardial hyperechogenicity and "comets" in patients with acute pericarditis but no pericardial effusion: a comparison study with age-matched healthy controls.
2. Cardiac magnetic resonance radiofrequency tissue tagging for diagnosis of constrictive pericarditis: A proof of concept study.
3. Protein-losing enteropathy in camptodactyly-arthropathy-coxa vara-pericarditis (CACP) syndrome.
4. Recurrent pericarditis: new and emerging therapeutic options.
5. Transient Constrictive Pericarditis: Current Diagnostic and Therapeutic Strategies.
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7. CEACAM1 and MICA as novel serum biomarkers in patients with acute and recurrent pericarditis.
8. Azacitidine-Induced Pericarditis: A Case Series.
9. Tuberculous constrictive pericarditis complicated with tuberculous mediastinitis - case report.
10. A retrospective study of patients with adult-onset Still's disease: is pericarditis a possible predictor for biological disease-modifying anti-rheumatic drugs need?
11. An Interesting Case of Viral Pericarditis.
12. ST depression in lead aVL differentiates inferior ST-elevation myocardial infarction from pericarditis.
13. Recurrent Pericarditis, an Unexpected Effect of Adjuvant Interferon Chemotherapy for Malignant Melanoma.
14. Robotic Endoscopic Off-Pump Total Pericardiectomy in Constrictive Pericarditis.
15. Intravenous human immunoglobulins for refractory recurrent pericarditis: a systematic review of all published cases.
16. A case of immunoglobulin G4-related constrictive pericarditis.
17. A Mysterious Effusion: Tuberculous Pericarditis.
18. Purulent pericarditis and pericardiac tamponade in a pregnant hemodialysis patient: A case report.
19. Constrictive pericarditis following open-heart surgery in a child.
20. Acute Effusive Pericarditis due to Horse Chestnut Consumption.
21. The Use of IL-1 Receptor Antagonist (Anakinra) in Idiopathic Recurrent Pericarditis: A Narrative Review.
22. Non-typeable Haemophilus influenzae purulent pericarditis in a child with cystic fibrosis.
23. Long-evolution ascites in a patient with constrictive pericarditis.
24. Cognitive Machine-Learning Algorithm for Cardiac Imaging: A Pilot Study for Differentiating Constrictive Pericarditis From Restrictive Cardiomyopathy.
25. Echocardiographic parameters in clinical responders to surgical pericardiectomy - A single center experience with chronic constrictive pericarditis.
26. Right sided constrictive pericarditis as a cause of ascites
27. Non-thrombocytopenic purpura in familial Mediterranean fever-comorbidity with Henoch-Schonlein purpura or an additional rare manifestation of familial Mediterranean fever?
28. Acute pericarditis: A presenting manifestation of aortic dissection
29. Non-hodgkin's lymphoma presenting as constrictive pericarditis: A rare case report
30. Utility of late gadolinium enhancement in pediatric cardiac MRI
31. Myocardial herniation in constrictive pericarditis mimicking arrhythmogenic right ventricular cardiomyopathy
32. The role of combined electrocardiogram criteria in differential diagnosis of acute pericarditis: PR segment and QT interval

33. Author response to comments regarding "sT depression in lead aVL differentiates inferior ST elevation myocardial infarction from pericarditis"
34. A Mysterious Effusion: Tuberculous Pericarditis
35. Cognitive Machine-Learning Algorithm for Cardiac Imaging; A Pilot Study for Differentiating Constrictive Pericarditis from Restrictive Cardiomyopathy
36. Assessment of cardiac arrhythmias in patients with ankylosing spondylitis by signal-averaged P wave duration and P wave dispersion
37. An unusual appearance of stenosis on coronary angiogram: Primary pericardial angiosarcoma
38. Cryoablation for the treatment of drug refractory symptomatic atrial fibrillation: A regional medical center experience
39. CEACAM1 and MICA as novel serum biomarkers in patients with acute and recurrent pericarditis
40. Echocardiographic parameters in clinical responders to surgical pericardiectomy - A single center experience with chronic constrictive pericarditis
41. Imaging of Pericardial Diseases
42. Influenza related complications and deaths in Australian children: Seasonal surveillance 2008-2015
43. Why do doctors prescribe dialysis? The peridialysis study
44. Usefulness of Novel Immunotherapeutic Strategies for Idiopathic Recurrent Pericarditis
45. The clinical profile of kawasaki disease in algerian children: A single institution experience
46. Expression of immune-related genes of ducks infected with avian pathogenic Escherichia coli (APEC)
47. Durability after aortic valve replacement with the Mitroflow versus the Perimount pericardial bioprosthesis: A single-centre experience in 2393 patients
48. Clinical and histopathological features of fatal cases with dengue and chikungunya virus co-infection in Colombia, 2014 to 2015
49. Hypercalcemia-induced pancreatitis presenting with acute ST-elevations mimicking a myocardial infarction
50. Diagnostic and prognostic utility of cardiovascular magnetic resonance imaging in heart failure with preserved ejection fraction

Results 50 of 50 results on Saved Results

1. Pericardial hyperechogenicity and "comets" in patients with acute pericarditis but no pericardial effusion: a comparison study with age-matched healthy controls.

Source: Acta bio-medica : Atenei Parmensis; 2016; vol. 87 (no. 1); p. 81-85

Publication Date: 2016

Publication Type(s): Journal Article

Author(s): Sartorio, Daniele; Siniscalchi, Carmine; Reverberi, Claudio; Gaibazzi, Nicola

Abstract: According to the published data and guidelines the diagnosis of pericarditis is mainly clinical; if we exclude patients with pericardial effusion, no single study has been able to relate specific echocardiographic findings to acute pericarditis. We hypothesized that pericardial hyperechogenicity and a defined finding that we named "pericardial comets", in analogy to lung comets, may be associated with acute pericarditis. We retrospectively analysed the echocardiograms of patients aged <50 y/o with a confirmed pericarditis diagnosis and compared them with 2 prospectively healthy controls groups (either < or > 50 y/o) to detect a potential association of pericardial hyperechogenicity and/or pericardial comets with acute pericarditis. Comparison between the pericarditis and the control groups did not evidence significant differences regarding the prevalence of hyperechogenicity and pericardial comets when comparing patients with pericarditis and age-matched controls (younger than 50 years); the group of elderly healthy controls (>50 y/o) showed significantly lower prevalence of pericardial hyperechogenicity ($p<0.001$) and comets ($p<0.001$), compared with the other 2 groups. A significantly higher number of patients with pericarditis demonstrated ≥2 pericardial comets compared with age-matched controls (68% vs 48%, $p=0.042$). The echocardiographic prevalence of both pericardial hyperechogenicity and comets per patient is heavily influenced by age (inversely proportional), but the presence of at least 2 pericardial comets is significantly more frequent in patients with pericarditis than in healthy aged-matched controls. Nonetheless, this echocardiographic finding may have limited clinical usefulness, due to the frequent detection of ≥2 comets in healthy young subjects also.

Database: Medline

2. Cardiac magnetic resonance radiofrequency tissue tagging for diagnosis of constrictive pericarditis: A proof of concept study.

Source: The Journal of thoracic and cardiovascular surgery; May 2016; vol. 151 (no. 5); p. 1348-1355

Publication Date: May 2016

Publication Type(s): Journal Article

Author(s): Power, John A; Thompson, Diane V; Rayarao, Geetha; Doyle, Mark; Biederman, Robert W W

Abstract: Invasive cardiac catheterization is the venerable "gold standard" for diagnosing constrictive pericarditis. However, its sensitivity and specificity vary dramatically from center to center. Given the ability to unequivocally define segments of the pericardium with the heart via radiofrequency tissue tagging, we hypothesize that cardiac magnetic resonance has the capability to be the new gold standard. All patients who were referred for cardiac magnetic resonance evaluation of constrictive pericarditis underwent cardiac magnetic resonance radiofrequency tissue tagging to define visceral-parietal pericardial adherence to determine constriction. This was then compared with intraoperative surgical findings. Likewise, all preoperative cardiac catheterization testing was reviewed in a blinded manner. A total of 120 patients were referred for clinical suspicion of constrictive pericarditis. Thirty-nine patients were defined as constrictive pericarditis positive solely via radiofrequency tissue-tagging cardiac magnetic resonance, of whom 21 were positive, 4 were negative, and 1 was equivocal for constrictive pericarditis, as defined by cardiac catheterization. Of

these patients, 16 underwent pericardiectomy and were surgically confirmed. There was 100% agreement between cardiac magnetic resonance-defined constrictive pericarditis positivity and postsurgical findings. No patients were misclassified by cardiac magnetic resonance. In regard to the remaining constrictive pericarditis-positive patients defined by cardiac magnetic resonance, 10 were treated medically, declined, were ineligible for surgery, or were lost to follow-up. Long-term follow-up of those who were constrictive pericarditis negative by cardiac magnetic resonance showed no early or late crossover to the surgery arm. Cardiac magnetic resonance via radiofrequency tissue tagging offers a unique, efficient, and effective manner of defining clinically and surgically relevant constrictive pericarditis. Specifically, no patient who was identified with constriction via cardiac magnetic resonance underwent inappropriate sternotomy. However, catheterization had substantial and unacceptable false-positive and false-negative rates with important clinical ramifications.

Database: Medline

3. Protein-losing enteropathy in camptodactyly-arthropathy-coxa vara-pericarditis (CACP) syndrome.

Source: Pediatric rheumatology online journal; 2016; vol. 14 (no. 1); p. 32

Publication Date: 2016

Publication Type(s): Journal Article

Author(s): Peters, Bram; Schuurs-Hoeijmakers, Janneke H M; Fuijkschot, Joris; Reimer, Annette; van der Flier, Michiel; Lugtenberg, Dorien; Hoppenreijs, Esther P A H

Abstract: Camptodactyly-arthropathy-coxa vara-pericarditis (CACP, OMIM: #208250) syndrome is a rare autosomal recessive disease that can be difficult to recognise not only because of its wide clinical variability but also because of its clinical resemblance to juvenile idiopathic arthritis (JIA). PRG4 is the only gene so far known to be associated with CACP syndrome. Children with CACP syndrome lack the glycoprotein lubricin due to recessive mutations in PRG4. Lubricin serves as a lubricant in joints, tendons and visceral cavities (pleural cavity, pericardium) and inhibits synovial proliferation. Children with CACP syndrome suffer from congenital camptodactyly, arthropathy, coxa vara and sometimes pericarditis. This report concerns a child with CACP syndrome complicated by protein-losing enteropathy (PLE), caused by constrictive pericarditis and so contributes to knowledge of the presentation of CACP syndrome. A 10- year-old girl with consanguineous parents suffered from congenital camptodactyly and progressive swollen and painful joints. Her father and his sister had similar childhood-onset joint complaints. Laboratory tests showed no signs of inflammation but showed persistent low protein- and IgG- levels, indicating a secondary immunodeficiency. Increased alpha antitrypsin clearance confirmed PLE. Abdominal ultrasound with Doppler showed hepatomegaly and portal hypertension. Echocardiography suggested constrictive pericarditis. However, heart catheterization could not confirm this. Ultrasound and X-ray examination of the joints combined with a puncture of the synovial fluid were performed. These results, combined with the clinical presentation and the consanguinity, suggested CACP syndrome. Due to excessive enteral protein losses, the patient was treated with Cotrimoxazol prophylaxis and immunoglobulin supplements. These supplements were inadequate to achieve normal IgG values. As constrictive pericarditis with subsequent PLE was the best explanation for the excessive IgG losses, pericardiectomy was performed with good results. Genetic testing in our patient was complicated but revealed a pathogenic mutation within the repeat sequence in exon 7 of the PRG4 gene. PLE resulting from constrictive pericarditis can be a complication of CACP syndrome. As serious complications can arise from the resulting secondary immunodeficiency, we recommend regular evaluation of clinical symptoms of constrictive pericarditis and PLE in children with CACP syndrome.

Database: Medline

4. Recurrent pericarditis: new and emerging therapeutic options.

Source: Nature reviews. Cardiology; Feb 2016; vol. 13 (no. 2); p. 99-105

Publication Date: Feb 2016

Publication Type(s): Journal Article; Review

Author(s): Imazio, Massimo; Lazaros, George; Brucato, Antonio; Gaita, Fiorenzo

Abstract: Recurrent pericarditis is one of the most common and troublesome complications after an episode of pericarditis, and affects 20-50% of patients treated for pericarditis. In most of these patients, the pericarditis remains idiopathic, although an immune-mediated (either autoimmune or autoinflammatory) pathogenesis is often presumed. The mainstay of therapy for recurrences is aspirin or NSAIDs, with the adjunct of colchicine. Corticosteroids are a second-line option to be considered for specific indications, such as connective tissue disease or pregnancy; contraindications or intolerance to aspirin, NSAIDs, and/or colchicine; or insufficient response to these medications. Furthermore, corticosteroids can be added to NSAIDs and colchicine in patients with persistent symptoms. In patients who do not respond adequately to any of these conventional therapies, alternative treatment options include azathioprine, intravenous human immunoglobulins, and anakinra. An improved understanding of how recurrent pericarditis develops after an initiating event is critical to prevent this complication, and further research is needed into the pathogenesis of recurrences. We discuss the aetiology and diagnosis of recurrent pericarditis, and extensively review the treatment options for this condition.

Database: Medline

5. Transient Constrictive Pericarditis: Current Diagnostic and Therapeutic Strategies.

Source: Current cardiology reports; May 2016; vol. 18 (no. 5); p. 41

Publication Date: May 2016

Publication Type(s): Journal Article; Review

Author(s): Gentry, James; Klein, Allan L; Jellis, Christine L

Abstract: Transient constrictive pericarditis is increasingly recognized as a distinct sub-type of constrictive pericarditis. The underlying pathophysiology typically relates to impaired pericardial distensibility, associated with acute or sub-acute inflammation, rather than the fibrosis or calcification often seen in chronic pericardial constriction. Accordingly, patients may present clinically with concomitant features of pericarditis and constrictive physiology. Non-invasive multimodality imaging is advocated for diagnosis of transient constrictive pericarditis. Echocardiography remains the mainstay for initial evaluation of the dynamic features of constriction. However, cardiac magnetic resonance imaging can provide complimentary functional information, with the addition of dedicated sequences to assess for active pericardial edema and inflammation. Although transient pericardial constriction can spontaneously resolve, institution of anti-inflammatory therapy may hasten resolution or even prevent progression to chronic pericardial constriction. Non-steroidal anti-inflammatory agents remain the initial treatment of choice, with subsequent consideration of colchicine, steroids, and other immune-modulating agents in more refractory cases.

Database: Medline

6. Recurrent Pericarditis: Modern Approach in 2016.

Source: Current cardiology reports; Jun 2016; vol. 18 (no. 6); p. 50

Publication Date: Jun 2016

Publication Type(s): Journal Article; Review

Author(s): Imazio, Massimo; Adler, Yehuda; Charron, Philippe

Abstract: Recurrent pericarditis is one of the most troublesome complications of pericarditis occurring in about one third of patients with a previous attack of pericarditis. The pathogenesis is presumed to be autoimmune and/or autoinflammatory in most cases. The mainstay of therapy for recurrences is physical restriction and anti-inflammatory therapy based on aspirin or NSAID plus colchicine. Corticosteroids at low to moderate doses (e.g., prednisone 0.2 to 0.5 mg/kg/day) should be considered only after failure of aspirin/NSAID (and more than one of these drugs) or for specific indications (e.g., pregnancy, systemic inflammatory diseases on steroids, renal failure, concomitant oral anticoagulant therapy). One of the most challenging issues is how to cope with patients who have recurrences despite colchicine. A small subset of patients (about 5 %) may develop corticosteroid-dependence and colchicine resistance. Among the emerging treatments, the three most common and evidence-based therapies are based on azathioprine, human intravenous immunoglobulin (IVIG), and anakinra. After failure of all options of medical therapy or for those patients who do not tolerate medical therapy or have serious adverse events related to medical therapy, the last possible option is the surgical removal of the pericardium. Total or radical pericardiectomy is recommended in these cases in experienced centers performing this surgery. A stepwise approach is recommended starting from NSAID and colchicine, corticosteroid and colchicine, a combination of the three options (NSAID, colchicine and corticosteroids), then azathioprine, IVIG, or anakinra as last medical options before pericardiectomy.

Database: Medline

7. CEACAM1 and MICA as novel serum biomarkers in patients with acute and recurrent pericarditis.

Source: Oncotarget; Apr 2016; vol. 7 (no. 14); p. 17885-17895

Publication Date: Apr 2016

Publication Type(s): Journal Article

Author(s): Markel, Gal; Imazio, Massimo; Koren-Morag, Nira; Galore-Haskel, Gilli; Schachter, Jacob; Besser, Michal; Cumetti, Davide; Maestroni, Silvia; Altman, Arie; Shoenfeld, Yehuda; Brucato, Antonio; Adler, Yehuda

Abstract: The immune response plays a significant role in pericarditis, but the mechanisms of disease are poorly defined. Further, efficient monitoring and predictive clinical tools are unavailable. Carcinoembryonic antigen cell adhesion molecule 1 (CEACAM1) is an immune-inhibitory protein, while MHC class I chain related protein A (MICA) and B (MICB) have an immune-stimulating function. Serum CEACAM1, MICA and MICB concentrations were measured by ELISA in ~50 subjects of each group: acute pericarditis (AP), recurrent pericarditis (RP) and lupus (SLE) patients, metastatic melanoma patients as well as healthy donors. Serum CEACAM1 was dramatically elevated in AP and RP patients, but not in SLE patients, and displayed a highly accurate profile in ROC curve analyses. MICA and MICB were elevated in some pericarditis patients. All markers were enhanced in metastatic melanoma patients irrespective of neoplastic pericardial involvement. Etiology-guided analysis of RP patients showed that very low MICA levels were associated with idiopathic RP, while high MICA was associated with autoimmune and post-operative RP. Importantly, MICA was significantly associated with recurrences, independently of other potentially confounding parameters such as age, time of follow up or treatment modality. Here we report for the first time on CEACAM1 as a potentially novel biomarker for pericarditis, as well as on MICA as an innovative prognostic marker in these patients. Determination of the roles of these immune factors, as well as their diagnostic and prognostic values should be determined in future prospective studies.

Database: Medline

8. Azacitidine-Induced Pericarditis: A Case Series.

Source: Pharmacotherapy; Apr 2016; vol. 36 (no. 4); p. 443-448

Publication Date: Apr 2016

Publication Type(s): Journal Article

Author(s): Newman, Matthew; Malla, Midhun; Gojo, Ivana

Abstract: To describe three cases of pericarditis probably related to azacitidine administration in a span of 3 years at our center. Case series. Comprehensive cancer center within a large, academic medical center. Three patients with high-grade myelodysplastic syndrome or acute myeloid leukemia who received azacitidine. None. None. Patient 1 presented with pericarditis after cycle 2 of azacitidine, patient 3 presented 3 weeks after completing cycle 5, and patient 2 presented during cycle 1. All patients were treated symptomatically and responded to corticosteroids. None of the patients were re-challenged with hypomethylating agents. Use of the Naranjo adverse drug reaction probability scale indicated a probable adverse drug reaction (score of 6) for patients 1 and 3 and a possible adverse drug reaction (score of 3) for patient 2. With the exclusion of other common causes of pericarditis, we believe it is likely that azacitidine was responsible for the findings in our patients. Providers caring for patients receiving hypomethylating agents should consider this potential adverse drug reaction in the setting of unexplained chest pain or other clinical signs consistent with cardiotoxicity. © 2016 Pharmacotherapy Publications, Inc.

Database: Medline

9. Tuberculous constrictive pericarditis complicated with tuberculous mediastinitis - case report.

Source: Romanian journal of morphology and embryology = Revue roumaine de morphologie et embryologie; 2016; vol. 57 (no. 1); p. 237-242

Publication Date: 2016

Publication Type(s): Journal Article

Author(s): Man, Milena Adina; NiŢu, Mimi Floarea; Strâmbu, Lelia; Florescu, Cristina; Streba, Costin Teodor; Trofor, Antigona Carmen

Abstract: Constrictive pericarditis is a rare and severe disease. A 37-year-old patient was admitted in the hospital for dyspnea, precordial pain, right-sided cardiac failure. Chest X-ray showed cardiac enlargement and an opacity suggestive for pleural effusion. Echocardiography revealed an adhesive-effusive-constrictive pericarditis, a very thickened pericardium and bilateral pleural effusion. After a pericardiectomy done to restore cardiac compensation and to identify etiological factors, a tuberculous pericarditis (TBP) was diagnosed. After surgery and starting anti-TB treatment, the patient presented altered clinical status, dyspnea, dry cough, fever and delayed callus formation at sternum level. Thoracic scan revealed mediastinal air collections, pericarditis and pleurisy. Thus, the TBP diagnosis was extended to mediastinal TB and anti-TB therapy was continued. After four months of treatment, another thoracic scan showed disappearance of the mediastinal air-leakage bubbles, multiple new micronodules in both lungs and lymph nodes of up to 15 mm; also increasing pericardial and pleural effusions. This case was interpreted as a TB treatment failure situation. A retreatment regimen was started, resulting in a slow favorable outcome. Pericardial TB is a rare condition, usually with delayed diagnosis and poor treatment benefits. Whenever possible, earlier diagnostic can contribute to better management of these cases.

Database: Medline

10. A retrospective study of patients with adult-onset Still's disease: is pericarditis a possible predictor for biological disease-modifying anti-rheumatic drugs need?

Source: Clinical rheumatology; Aug 2016; vol. 35 (no. 8); p. 2117-2123

Publication Date: Aug 2016

Publication Type(s): Journal Article

Author(s): Dall'Ara, Francesca; Frassi, Micol; Tincani, Angela; Airò, Paolo

Abstract: The aims of this study were to look for clinical or serological markers able to predict the use of biological disease-modifying anti-rheumatic drugs (bDMARDs) in patients with adult-onset Still's disease (AOSD) and to evaluate the efficacy and safety of bDMARDs in AOSD. In a single-center retrospective study, 39 patients with AOSD were divided into two groups according to whether they were ever treated with bDMARDs or not. Literature was searched for articles dealing with possible predictors of the use of bDMARDs in AOSD. Among the 18 AOSD patients who received at least one bDMARD, the prevalence of pericarditis was higher than that in the other patients [p = 0.014, odds ratio (OR) = 13.4, 95 % confidence interval (CI) = 1.45 to 122]. Literature search retrieved another paper dealing with predictors of bDMARDs need in AOSD: the analysis pooling data from our series and this previous report confirmed pericarditis at disease onset as a predictor of bDMARDs need (p = 0.028, OR = 3.62, 95 % CI = 1.22 to 10.7). A complete remission was observed in 17 out of 18 patients treated with bDMARDs, allowing withdrawal or tapering of corticosteroid therapy (p < 0.001), but because of inefficacy or adverse events, some patients received more than one bDMARD during the course of the disease and 31 different trials of bDMARDs were needed. Pericarditis at disease onset may be a predictor of bDMARDs need in AOSD. These drugs have a good efficacy and safety profile and should be considered for patients not responding to conventional therapy.

Database: Medline

11. An Interesting Case of Viral Pericarditis.

Source: Pediatric emergency care; May 2016; vol. 32 (no. 5); p. 323-325

Publication Date: May 2016

Publication Type(s): Journal Article

Author(s): van Diepen, Kelly Marie; de Almeida, Claudia Lace; Kam, April Jacqueline

Abstract:A previously healthy 14-year-old girl presented to the emergency department with a 3-day history of upper respiratory symptoms and 2 syncopal episodes. She was initially febrile, tachycardic, and tachypneic; the initial electrocardiogram showed diffuse T-wave inversions and right atrial enlargement. There was no pericardial effusion on bedside and formal echocardiography; the latter, however, revealed a hyperechogenic pericardium. A viral swab was positive for influenza B. Treatment with intravenous rehydration and ibuprofen was started with good response. The patient went home 24 hours later with the diagnosis of mild pericarditis and syncope likely secondary to dehydration impaired diastolic filling.The incidence of acute pericarditis in previously healthy children is unknown. There are no known case reports of influenza B-associated pericarditis in the pediatric population. There is little high quality evidence to guide the diagnosis and management of pericarditis in children. However, limited data suggest that the typically described presentation of chest pain, pericardial rub, pericardial effusion, and electrocardiogram changes occurs in children. The pediatric population seems to respond well to nonsteroidal anti-inflammatory drugs.

Database: Medline

12. ST depression in lead aVL differentiates inferior ST-elevation myocardial infarction from pericarditis.

Source: The American journal of emergency medicine; Feb 2016; vol. 34 (no. 2); p. 149-154

Publication Date: Feb 2016

Publication Type(s): Journal Article

Author(s): Bischof, Johanna E; Worrall, Christine; Thompson, Peter; Marti, David; Smith, Stephen W

Abstract:ST-segment elevation (STE) due to inferior STE myocardial infarction (STEMI) may be misdiagnosed as pericarditis. Conversely, this less life-threatening etiology of ST elevation may be confused for inferior STEMI. We sought to determine if the presence of any ST-segment depression in lead aVL would differentiate inferior STEMI from pericarditis. Retrospective study of 3 populations. Cohort 1 included patients coded as inferior STEMI, cohort 2 included patients with a discharge diagnosis of pericarditis who presented with chest pain and at least 0.5 mm of ST elevation in at least 1 inferior lead. We analyzed the presenting electrocardiogram in both populations, with careful assessment of leads II, III, aVF, and aVL. In addition, we retrospectively studied a third cohort of patients with subtle inferior STEMI (<1-mm STE with occluded artery on catheterization) and assessed the sensitivity of ST depression in lead aVL for this group. Of 154 inferior STEMI patients, 154 had some amount of ST depression in lead aVL (100%; confidence interval, 98%-100%). Of the 49 electrocardiograms in the pericarditis group, all 49 had some inferior STE but none had any ST-segment depression in lead aVL (specificity, 100%; confidence interval, 91%-100%). In the third cohort, there were 272 inferior MIs with coronary occlusion, of which 54 were "subtle." Of these, 49 had some ST depression in lead aVL. When there is inferior ST-segment elevation, the presence of any ST depression in lead aVL is highly sensitive for coronary occlusion in inferior myocardial infarction and very specific for differentiating inferior myocardial infarction from pericarditis.

Database: Medline

13. Recurrent Pericarditis, an Unexpected Effect of Adjuvant Interferon Chemotherapy for Malignant Melanoma.

Source: Case reports in cardiology; 2016; vol. 2016 ; p. 1342028

Publication Date: 2016

Publication Type(s): Journal Article

Author(s): Ashraf, Farhan; Marmoush, Fady; Shafi, Muhammad Ismail; Shah, Ashish

Abstract: Drug-induced pericarditis is a well-described cardiac pathology that can result from a variety of medications; however, interferon-mediated pericarditis is extremely rare. We present a case of a young female with recurrent pericarditis due to interferon therapy. The role of interferon in adjuvant chemotherapy is well known and yields good effect, but this case highlights the very uncommon phenomena of interferon induced pericarditis and the significant distress it can cause.

Database: Medline

14. Robotic Endoscopic Off-Pump Total Pericardiectomy in Constrictive Pericarditis.

Source: Innovations (Philadelphia, Pa.); 2016; vol. 11 (no. 2); p. 134-137

Publication Date: 2016

Publication Type(s): Journal Article

Author(s): Maciolek, Kimberly; Asfaw, Zewditu E; Krienbring, Dorothy J; Arnsdorf, Susan E; Balkhy, Husam H

Abstract: Although rare, constrictive pericarditis is a serious condition with debilitating symptoms and often severe heart failure. Total pericardiectomy is the most effective treatment and is traditionally performed via median sternotomy. With the increasing use of minimally invasive techniques, there have been reports of partial pericardiectomy via thoracoscopy but with suboptimal exposure and difficulty identifying both phrenic nerves. Robotic surgery offers both small incisions and enhanced visualization. We present four cases of robotic endoscopic off-pump total pericardiectomy for constrictive pericarditis. Four patients underwent off-pump total

pericardiectomy with robotic assistance for constrictive pericarditis. All had constrictive physiology demonstrated by right heart catheterization and/or echocardiogram. One was also found to have coronary artery disease and underwent concurrent totally endoscopic coronary artery bypass grafting left internal mammary artery to left anterior descending artery. Ports were placed in the left second, fourth, and sixth intercostal spaces. The left lung was isolated and deflated with CO2 insufflation, aiding in exposure. With the use of electrocautery, the pericardium was removed first posterior to the left phrenic nerve, then anteriorly all the way to the right phrenic nerve, and caudally from the diaphragmatic reflection to the great vessel cephalad. A stabilizer in the subcostal fourth robotic arm was used to assist in the dissection. Two of four patients were extubated within 6 hours after surgery and transferred to the floor on postoperative day 1. Both were discharged home by postoperative day 5. Two of four patients had preoperative sequelae from chronic constriction and necessitated longer hospital and intensive care unit stays but had improvement in symptoms and were discharged home within 3 weeks. Total pericardiectomy for constrictive pericarditis can be performed using a robotic approach. In contrast to thoracoscopy, it offers better visualization of both phrenic nerves, avoids injury, and allows a thorough pericardial dissection. In our experience, the robotic left chest approach has proven more efficacious in removing the posterior pericardium than is allowed with median sternotomy.

Database: Medline

15. Intravenous human immunoglobulins for refractory recurrent pericarditis: a systematic review of all published cases.

Source: Journal of cardiovascular medicine (Hagerstown, Md.); Apr 2016; vol. 17 (no. 4); p. 263-269

Publication Date: Apr 2016

Publication Type(s): Journal Article

Author(s): Imazio, Massimo; Lazaros, George; Picardi, Elisa; Vasileiou, Panagiotis; Carraro, Mara; Tousoulis, Dimitrios; Belli, Riccardo; Gaita, Fiorenzo

Abstract: Refractory recurrent pericarditis is a major clinical challenge after colchicine failure, especially in corticosteroid-dependent patients. Human intravenous immunoglobulins (IVIGs) have been proposed as possible therapeutic options for these cases. The goal of this systematic review is to assess the efficacy and safety of IVIGs in this context. Studies reporting the use of IVIG for the treatment of recurrent pericarditis and published up to October 2014 were searched in several databases. All references found, upon initial assessment at title and abstract level for suitability, were consequently retrieved as full reports for further appraisal. Among the 18 citations retrieved, 17 reports (4 case series and 13 single case reports, with an overall population of 30 patients) were included. The mean disease duration was 14 months and the mean number of recurrences before IVIG was 3. Approximately 47% of patients had idiopathic recurrent pericarditis, 10% had an infective cause, and the remainder a systemic inflammatory disease. Nineteen out of the 30 patients (63.3%) were on corticosteroids at IVIG commencement. IVIGs were generally administered at a dose of 400-500 mg/kg/day for 5 consecutive days with repeated cycles according to the clinical response. Complications were uncommon (headache in ~3%) and not life-threatening. After a mean follow-up of approximately 33th months, recurrences occurred in 26.6% of cases after the first IVIG cycle, and 22 of the 30 patients (73.3%) were recurrence-free. Five patients (16.6%) were on corticosteroids at the end of the follow-up. IVIGs are rapidly acting, well tolerated, and efficacious steroid-sparing agents in refractory pericarditis.

Database: Medline

16. A case of immunoglobulin G4-related constrictive pericarditis.

Source: Annals of translational medicine; Feb 2016; vol. 4 (no. 3); p. 57

Publication Date: Feb 2016

Publication Type(s): Journal Article

Author(s): Luo, Wen-Qi; Fang, Fang; Zhen, Wen-Jun; Ouyang, Xiao-Kang; Wang, Huai-Bin; Wang, Zi; Zhong, You

Abstract:A 47-year-old man was admitted with a complaint of upper abdominal distension and shortness of breath. The constrictive pericarditis was diagnosed based on the transthoracic echocardiogram (TTE) and chest CT scan. Pathology revealed it is immunoglobulin (Ig) G4-related constrictive pericarditis. Likely, this is the first case of IgG4-related constrictive pericarditis reported in China.

Database: Medline

17. A Mysterious Effusion: Tuberculous Pericarditis.

Source: The Journal of pediatrics; Jul 2016; vol. 174 ; p. 271

Publication Date: Jul 2016

Publication Type(s): Journal Article

Author(s): Chiu, Nan-Chang; Wu, Shye-Jao; Chen, Ming-Ren; Peng, Chun-Chih; Chang, Lung; Chi, Hsin; Lin, Chien-Yu

Database: Medline

18. Purulent pericarditis and pericardiac tamponade in a pregnant hemodialysis patient: A case report.

Source: Hemodialysis international. International Symposium on Home Hemodialysis; Jan 2016; vol. 20 (no. 1); p. E5

Publication Date: Jan 2016

Publication Type(s): Journal Article

Author(s): Adam, Fatma Ulku; Avci, Begum; Koc, Mevlut

Abstract: Bacterial pericarditis is rare in chronic hemodialysis and has poor prognosis. In this case, we report a pregnant hemodialysis patient who developed purulent bacterial pericarditis and pericardiac tamponade in the 28th week of her pregnancy, and who had delivered a healthy living baby.

Database: Medline

19. Constrictive pericarditis following open-heart surgery in a child.

Source: Annals of pediatric cardiology; 2016; vol. 9 (no. 1); p. 68-71

Publication Date: 2016

Publication Type(s): Journal Article

Author(s): Deepti, Siddharthan; Gupta, Saurabh Kumar; Ramakrishnan, Sivasubramanian; Talwar, Sachin; Kothari, Shyam Sunder

Abstract:A 6-year- old child developed constrictive pericarditis 2 years after undergoing an open-heart surgery for a congenital cardiac disorder. No other cause of pericarditis was identified. The clinical condition improved after pericardiectomy. The case is reported for its rarity.

Database: Medline

20. Acute Effusive Pericarditis due to Horse Chestnut Consumption.

Source: The American journal of case reports; 2016; vol. 17 ; p. 305-308

Publication Date: 2016

Publication Type(s): Journal Article

Author(s): Edem, Efe; Kahyaoğlu, Behlül; Çakar, Mehmet Akif

Abstract:BACKGROUND There are many well-known causes of pericardial effusion, such as cancer metastasis, bacterial or viral pericarditis, and uremic pericarditis; however, no reports exist in the literature demonstrating a pericardial effusion that led to cardiac tamponade following consumption of an herbal remedy. CASE REPORT A 32-year-old male patient was referred to our cardiology outpatient clinic with a complaint of dyspnea. The patient's medical history was unremarkable; however, he had consumed 3 boxes of horse chestnut (Aesculus hippocastanum L) paste over the previous 1.5 months. His chest x-ray examination revealed an enlarged cardiac shadow and bilateral pleural effusion. On transthoracic echocardiographic examination, his ejection fraction was found to be 55% with circumferentially extended pericardial effusion that reached 3.9 cm at its maximal thickness. No growth had been detected in the pericardial and pleural biopsies or blood samples; there was no evidence of an infectious process in the physical examination. Based on this information, we diagnosed pericarditis resulting from the use of herbal remedies. This is the first report to demonstrate that herbal remedy consumption may cause this type of clinical condition. CONCLUSIONS Besides other well-known causes, pericardial effusion related to the consumption of herbal remedies should always be considered when treating patients with pericardial effusion caused by unclear etiologies.

Database: Medline

21. The Use of IL-1 Receptor Antagonist (Anakinra) in Idiopathic Recurrent Pericarditis: A Narrative Review.

Source: Cardiology research and practice; 2016; vol. 2016 ; p. 7840724

Publication Date: 2016

Publication Type(s): Journal Article; Review

Author(s): Baskar, Shankar; Klein, Allan L; Zeft, Andrew

Abstract: Recurrent pericarditis is a complication of acute pericarditis in 20-30% of the patients and is usually idiopathic in nature. The underlying pathogenesis of this condition remains unclear, although immune-mediated mechanisms seem likely. A subgroup of these patients with refractory symptoms can be challenging to manage, and multiple immunosuppressive medications have been used without consistent benefit. Anakinra, an interleukin-1 receptor antagonist, has been used in treatment of rheumatoid arthritis and autoinflammatory syndromes. Preliminary evidence suggests that anakinra could be a promising therapy for idiopathic recurrent pericarditis. In this narrative review, we summarize the current understanding of the etiopathogenesis of idiopathic recurrent pericarditis, mechanism of action of anakinra, and the preliminary evidence, supporting the use of anakinra in pericarditis.

Database: Medline

22. Non-typeable Haemophilus influenzae purulent pericarditis in a child with cystic fibrosis.

Source: Pediatrics international : official journal of the Japan Pediatric Society; Jul 2016; vol. 58 (no. 7); p. 607-609

Publication Date: Jul 2016

Publication Type(s): Case Reports

Author(s): Downes, Kevin J; Abulebda, Kamal; Siracusa, Christopher; Moore, Ryan; Staat, Mary A; Poynter, Sue E

Abstract: Early airway colonization and infection with Haemophilus influenzae in children with cystic fibrosis (CF) is common. Although the pathogenicity of non-typeable H. influenzae (NTHi) in patients with CF is controversial, this organism can cause both upper and lower respiratory tract infections. Extra-pulmonary disease, however, is rare. Purulent pericarditis is a suppurative complication of bacterial infection of the pericardial space that can arise as a result of direct extension from an adjacent infection. We describe a case of purulent pericarditis due to NTHi in a young child with CF that developed as a complication of inadequately treated bronchopneumonia. © 2016 Japan Pediatric Society.

Database: Medline

23. Long-evolution ascites in a patient with constrictive pericarditis.

Source: Revista española de enfermedades digestivas : organo oficial de la Sociedad Española de Patología Digestiva; Jun 2016; vol. 108 (no. 6); p. 368-371

Publication Date: Jun 2016

Publication Type(s): Journal Article

Author(s): Domingos Nunes, Gonçalo Filipe; Fatela, Narcisa; Ramalho, Fernando

Abstract: Constrictive pericarditis (CP) is an uncommon disease resulting from chronic pericardial inflammation, fibrosis and calcification. Once there are atypical forms of presentation, with subtle or nonexistent cardiorespiratory symptoms, diagnosis may be challenging and difficult. Recurrent ascites in patients with congestive hepatopathy due to constrictive pericarditis is common and, in most cases, reversible after pericardiectomy. Nevertheless, development of persistent liver dysfunction may be a long-term complication. The present work describes a 23 years old man with growth delay, dyspnoea and long evolution ascites, whose exhaustive etiological investigation led to diagnosis. Afterwards the patient underwent elective surgery with symptom and general condition improvement. Ascites differential diagnosis and its association with constrictive pericarditis are briefly reviewed in this article.

Database: Medline

24. Cognitive Machine-Learning Algorithm for Cardiac Imaging: A Pilot Study for Differentiating Constrictive Pericarditis From Restrictive Cardiomyopathy.

Source: Circulation. Cardiovascular imaging; Jun 2016; vol. 9 (no. 6)

Publication Date: Jun 2016

Publication Type(s): Journal Article

Author(s): Sengupta, Partho P; Huang, Yen-Min; Bansal, Manish; Ashrafi, Ali; Fisher, Matt; Shameer, Khader; Gall, Walt; Dudley, Joel T

Abstract: Associating a patient's profile with the memories of prototypical patients built through previous repeat clinical experience is a key process in clinical judgment. We hypothesized that a similar process using a cognitive computing tool would be well suited for learning and recalling multidimensional attributes of speckle tracking echocardiography data sets derived from patients with known constrictive pericarditis and restrictive cardiomyopathy. Clinical and echocardiographic data of 50 patients with constrictive pericarditis and 44 with restrictive cardiomyopathy were used for developing an associative memory classifier-based machine-learning algorithm. The speckle tracking echocardiography data were normalized in reference to 47 controls with no structural heart disease, and the diagnostic area under the receiver operating characteristic curve of the associative memory classifier was evaluated for differentiating constrictive pericarditis from restrictive

cardiomyopathy. Using only speckle tracking echocardiography variables, associative memory classifier achieved a diagnostic area under the curve of 89.2%, which improved to 96.2% with addition of 4 echocardiographic variables. In comparison, the area under the curve of early diastolic mitral annular velocity and left ventricular longitudinal strain were 82.1% and 63.7%, respectively. Furthermore, the associative memory classifier demonstrated greater accuracy and shorter learning curves than other machine-learning approaches, with accuracy asymptotically approaching 90% after a training fraction of 0.3 and remaining flat at higher training fractions. This study demonstrates feasibility of a cognitive machine-learning approach for learning and recalling patterns observed during echocardiographic evaluations. Incorporation of machine-learning algorithms in cardiac imaging may aid standardized assessments and support the quality of interpretations, particularly for novice readers with limited experience.

Database: Medline

25. Echocardiographic parameters in clinical responders to surgical pericardiectomy - A single center experience with chronic constrictive pericarditis.

Source: Indian heart journal; 2016; vol. 68 (no. 3); p. 316-324

Publication Date: 2016

Publication Type(s): Journal Article

Author(s): Patil, Devendra V; Sabnis, Girish R; Phadke, Milind S; Lanjewar, Charan P; Mishra, Prashant; Kulkarni, Dwarkanath V; Agrawal, Nandkishor B; Kerkar, Prafulla G

Abstract: Chronic constrictive pericarditis (CCP) is the end result of chronic inflammation of the pericardium. Developing countries continue to face a significant burden of CCP secondary to tuberculous pericarditis. Surgical pericardiectomy offers potential cure. However, there is paucity of echocardiography data in post-pericardiectomy patients vis-a-vis their clinical status. We studied the changes in multiple echocardiographic parameters in these patients before and after pericardiectomy. Twenty-three patients (14 men, 9 women) who underwent pericardiectomy for CCP in the last 5 years (from January 2009 to December 2014) were subjected to detailed clinical and echocardiographic evaluation during the study period (between June 2013 and December 2014). Patients with residual symptoms of NYHA class II and below were considered as 'responders'. The data thus obtained were compared to the pre-operative parameters. After pericardiectomy, the incidence of vena caval congestion decreased from 100% to 15% ($p<0.001$). There was significant reduction in the mean left atrial size from 39.33±10.52mm to 34.45±10.08mm ($p<0.001$) and also the ratio of left atrium to aortic annulus from 1.93 to 1.69 ($p<0.001$) among 'responders' to pericardiectomy. Septal bounce was observed to persist in 5 (25%) patients after pericardiectomy. There was significant respiratory variation of 39.23±15.11% in the mitral E velocity before pericardiectomy. After pericardiectomy, this variation reduced to 14.43±7.76% ($p<0.001$). There was also significant reduction in the respiratory variation in tricuspid E velocities from 31.33±18.81% to 17.35±16.26% ($p<0.001$). After pericardiectomy, the mean ratio of mitral annular velocities, medial e': lateral e', reduced from 1.08 to 0.87 ($p<0.03$). The phenomenon of 'annulus reversus' was found to persist in 6 'responders', thereby reflecting a 50% reduction in its incidence after pericardiectomy ($p<0.001$). The ratio of mitral E to medial e' (E/e') increased from 4.21±1.35 before pericardiectomy to 6.91±2.62 after pericardiectomy ($p=0.001$). Among clinical responders to surgical pericardiectomy, echocardiographic assessment revealed a significant reduction in vena caval congestion, LA size, ratio of LA to aortic annulus, septal bounce, respiratory variation in mitral and tricuspid E velocities, mitral annular medial e' and the phenomenon of annulus reversus. Also, there was a significant rise in minimum tricuspid and mitral E velocities and the E/e' ratio. Copyright © 2015 Cardiological Society of India. Published by Elsevier B.V. All rights reserved.

Database: Medline

26. Right sided constrictive pericarditis as a cause of ascites

Source: Irish Journal of Medical Science; Jun 2016; vol. 185

Publication Date: Jun 2016

Publication Type(s): Journal: Conference Abstract

Publisher: Springer-Verlag London Ltd

Author(s): Byrne A.; Farrelly C.; Steele C.

Abstract:A 47 year old male presented with increasing abdominal girth of 8 weeks duration. He had no past medical history but a weekly alcohol intake of 40-50 units. He had no stigmata of chronic liver disease and denied any chest pain or dyspnoea. Findings on clinical examination were only of large volume ascites with shifting dullness and mild lower limb oedema to the mid-calf. Hematological investigations including liver screen, Mantoux, TFTs and ESR were normal apart from deranged LFTs, a mild coagulopathy and an elevated pBNP. Ultrasound confirmed ascites and showed a homogenously hyperreflective liver and endoscopy showed no evidence of varices. Treatment of the ascites was undertaken with diuresis and two large volume paracentesis which showed a transudate (high serum-ascites albumin gradient). Further investigations were necessary as results so far were not in keeping with a diagnosis of ascites due to alcoholic cirrhosis. Liver biopsy was unhelpful showing non-specific inflammation. CT Thorax Abdomen and Pelvis was done to exclude malignancy and it revealed a heavily calcified pericardium. An echocardiogram showed a severely dilated right atrium, with normal right ventricular systolic pressures but no respiratory variation in the superior vena cava diameter. Angiogram showed normal coronary vessels. Cardiac MRI had findings consistent with right sided constrictive pericarditis. Paracentesis and diuresis brought his weight down from 116.8 to 83.2 kg, but it slowly began to creep back up after diuresis had to be stopped for profound hyponatremia. Definitive treatment with pericardial stripping was done and the patient is now 2 months post operation and doing well with a complete resolution of symptoms.

Database: EMBASE

27. Non-thrombocytopenic purpura in familial Mediterranean fever-comorbidity with Henoch-Schonlein purpura or an additional rare manifestation of familial Mediterranean fever?

Source: Rheumatology (United Kingdom); Jul 2016; vol. 55 (no. 7); p. 1153-1158

Publication Date: Jul 2016

Publication Type(s): Journal: Review

Publisher: Oxford University Press

Author(s): Ben-Chetrit E.; Yazici H.

Abstract: Henoch-Schonlein purpura is a relatively common vasculitis mainly affecting children. It is characterized by purpuric skin rash, abdominal cramping, and haematuria. Skin biopsies taken from Henoch-Schonlein purpura lesions disclose perivascular IgA deposits. FMF is an autoinflammatory disease characterized by recurrent attacks of fever lasting 2-3 days which resolve spontaneously. Typical manifestations of the disease are peritonitis, pleuritis, pericarditis, arthritis and erysipelas-like erythema usually affecting the lower limbs. Over the years many reviews emphasized the clinical impression that Henoch-Schonlein purpura is more common among FMF patients than in healthy control population. In this review we summarize these reports and show that sometimes Henoch-Schonlein purpura associated with FMF differs from typical isolated Henoch-Schonlein purpura, and this is also the case with polyarteritis nodosa and SpA associated with FMF. It is suggested that these clinical manifestations (polyarteritis nodosa, Henoch-Schonlein purpura and SpA) should be considered to be associated with FMF as part of what we call FMF rather than as co-existing additional separate clinical entities.

Database: EMBASE

28. Acute pericarditis: A presenting manifestation of aortic dissection

Source: BMJ Case Reports; 2016; vol. 2016

Publication Date: 2016

Publication Type(s): Journal: Note

Publisher: BMJ Publishing Group

Author(s): Soyer H.

Database: EMBASE

29. Non-hodgkin's lymphoma presenting as constrictive pericarditis: A rare case report

Source: Journal of Tehran University Heart Center; 2016; vol. 11 (no. 2); p. 92-97

Publication Date: 2016

Publication Type(s): Journal: Article

Publisher: Tehran Heart Center

Author(s): Nabati M.; Yosofnezhad K.; Ghaemian A.; Taghavi M.; Abbasi A.

Abstract: Constrictive pericarditis (CP) is an uncommon post inflammatory disorder. It is described as pericardial thickening, myocardial constriction, and impaired diastolic filling. The most common etiologies are idiopathy, mediastinal radiotherapy, and prior cardiac surgery. Less common etiologies include viral infections, collagen vascular disorders, renal failure, sarcoidosis, tuberculosis, and blunt chest trauma. CP can less commonly be caused by malignancy. We report a very rare case of non-Hodgkin's lymphoma (NHL) presenting twice with attacks of decompensated heart failure. Echocardiography revealed that CP was responsible for the patient's symptoms as the first manifestation of NHL. Chest computed tomography scan and biopsy findings were compatible with the diagnosis of NHL. The patient received R-CHOP (cyclophosphamide, hydroxydaunorubicin, Oncovin, and prednisone or prednisolone, combined with the monoclonal antibody rituximab) chemotherapy. Three months later, there was significant improvement in the patient's symptoms and considerable decrease in pericardial thickness.

Database: EMBASE

30. Utility of late gadolinium enhancement in pediatric cardiac MRI

Source: Pediatric Radiology; Jul 2016; vol. 46 (no. 8); p. 1096-1113

Publication Date: Jul 2016

Publication Type(s): Journal: Review

Publisher: Springer Verlag

Author(s): Etesami M.; Gilkeson R.C.; Rajiah P.

Abstract: Late gadolinium enhancement (LGE) cardiac magnetic resonance (MR) imaging sequence is increasingly used in the evaluation of pediatric cardiovascular disorders, and although LGE might be a normal feature at the sites of previous surgeries, it is pathologically seen as a result of extracellular space expansion, either from acute cell damage or chronic scarring or fibrosis. LGE is broadly divided into ischemic and non-ischemic patterns. LGE caused by myocardial infarction occurs in a vascular distribution and always involves the subendocardial portion, progressively involving the outer regions in a waveform pattern. Non-ischemic cardiomyopathies can have a mid-myocardial (either linear or patchy), subepicardial or diffuse subendocardial distribution. Idiopathic dilated cardiomyopathy can have a linear mid-myocardial pattern, while hypertrophic cardiomyopathy can

have fine, patchy enhancement in hypertrophied and non-hypertrophied segments as well as right ventricular insertion points. Myocarditis and sarcoidosis have a mid-myocardial or subepicardial pattern of LGE. Fabry disease typically affects the basal inferolateral segment while Danon disease typically spares the septum. Pericarditis is characterized by diffuse or focal pericardial thickening and enhancement. Thrombus, the most common non-neoplastic cardiac mass, is characterized by absence of enhancement in all sequences, while neoplastic masses show at least some contrast enhancement, depending on the pathology. Regardless of the etiology, presence of LGE is associated with a poor prognosis. In this review, we describe the technical modifications required for performing LGE cardiac MR sequence in children, review and illustrate the patterns of LGE in children, and discuss their clinical significance.

Database: EMBASE

31. Myocardial herniation in constrictive pericarditis mimicking arrhythmogenic right ventricular cardiomyopathy

Source: European Heart Journal; Jun 2016; vol. 37 (no. 23); p. 1849

Publication Date: Jun 2016

Publication Type(s): Journal: Note

Publisher: Oxford University Press

Author(s): Budjan J.; Henzler T.; Haghi D.; Papavassiliu T.

Database: EMBASE

32. The role of combined electrocardiogram criteria in differential diagnosis of acute pericarditis: PR segment and QT interval

Source: American Journal of Emergency Medicine; Jul 2016; vol. 34 (no. 7); p. 1309

Publication Date: Jul 2016

Publication Type(s): Journal: Letter

Publisher: W.B. Saunders

Author(s): Celik T.; Ozturk C.; Balta S.; Iyisoy A.

Database: EMBASE

33. Author response to comments regarding "sT depression in lead aVL differentiates inferior ST elevation myocardial infarction from pericarditis"

Source: American Journal of Emergency Medicine; Jul 2016; vol. 34 (no. 7); p. 1310

Publication Date: Jul 2016

Publication Type(s): Journal: Letter

Publisher: W.B. Saunders

Author(s): Bischof J.; Smith S.W.

Database: EMBASE

34. A Mysterious Effusion: Tuberculous Pericarditis

Source: Journal of Pediatrics; Jul 2016; vol. 174 ; p. 271

Publication Date: Jul 2016

Publication Type(s): Journal: Short Survey

Publisher: Mosby Inc.

Author(s): Chiu N.-C.; Chen M.-R.; Peng C.-C.; Chang L.; Chi H.; Wu S.-J.; Lin C.-Y.

Database: EMBASE

35. Cognitive Machine-Learning Algorithm for Cardiac Imaging; A Pilot Study for Differentiating Constrictive Pericarditis from Restrictive Cardiomyopathy

Source: Circulation: Cardiovascular Imaging; Jun 2016; vol. 9 (no. 6)

Publication Date: Jun 2016

Publication Type(s): Journal: Article

Publisher: Lippincott Williams and Wilkins

Author(s): Sengupta P.P.; Bansal M.; Huang Y.-M.; Ashrafi A.; Fisher M.; Gall W.; Shameer K.; Dudley J.T.

Abstract: Background - Associating a patient's profile with the memories of prototypical patients built through previous repeat clinical experience is a key process in clinical judgment. We hypothesized that a similar process using a cognitive computing tool would be well suited for learning and recalling multidimensional attributes of speckle tracking echocardiography data sets derived from patients with known constrictive pericarditis and restrictive cardiomyopathy. Methods and Results - Clinical and echocardiographic data of 50 patients with constrictive pericarditis and 44 with restrictive cardiomyopathy were used for developing an associative memory classifier-based machine-learning algorithm. The speckle tracking echocardiography data were normalized in reference to 47 controls with no structural heart disease, and the diagnostic area under the receiver operating characteristic curve of the associative memory classifier was evaluated for differentiating constrictive pericarditis from restrictive cardiomyopathy. Using only speckle tracking echocardiography variables, associative memory classifier achieved a diagnostic area under the curve of 89.2%, which improved to 96.2% with addition of 4 echocardiographic variables. In comparison, the area under the curve of early diastolic mitral annular velocity and left ventricular longitudinal strain were 82.1% and 63.7%, respectively. Furthermore, the associative memory classifier demonstrated greater accuracy and shorter learning curves than other machine-learning approaches, with accuracy asymptotically approaching 90% after a training fraction of 0.3 and remaining flat at higher training fractions. Conclusions - This study demonstrates feasibility of a cognitive machine-learning approach for learning and recalling patterns observed during echocardiographic evaluations. Incorporation of machine-learning algorithms in cardiac imaging may aid standardized assessments and support the quality of interpretations, particularly for novice readers with limited experience.

Database: EMBASE

36. Assessment of cardiac arrhythmias in patients with ankylosing spondylitis by signal-averaged P wave duration and P wave dispersion

Source: American Journal of Cardiology; Jun 2016; vol. 117

Publication Date: Jun 2016

Publication Type(s): Journal: Conference Abstract

Publisher: Elsevier Inc.

Author(s): Aksoy H.; Okutucu S.; Sayin B.Y.; Ercan E.A.; Oto A.; Kaya E.B.; Aytemir K.; Ozdemir O.; Inanici F.

Abstract: Objective: Aortic regurgitation, conduction disturbances, increased myocardial fibrosis and pericarditis could be seen in ankylosing spondylitis (AS). However, less attention has been paid to

supraventricular arrhythmias (SVA) and atrial conduction system changes. We aimed to assess SVA and conduction system changes in patients with AS. Methods: Twenty-eight patients (24 men; mean age, 28.7 +/- 5.7 years) with AS and 30 healthy volunteers (26 men; mean age, 29.3 +/- 5.8 years) were enrolled. All subjects were evaluated by 24-hour ambulatory electrocardiogram, 12 lead standard electrocardiogram (ECG) for P wave dispersion (Pd), and signal-averaged ECG (SAECG) for P wave duration (SAPWD). Results: SVAs were detected in 9 patients with AS (32%) and 3 controls (10%; p=0.02). Mean SAPWD (115.7+/-28.6ms vs. 100.2 +/- 18.7ms, p=0.017) and mean Pd (11.9+/-4.8ms vs. 9.3+/-3.6ms, 0.023) was longer in patients with AS than control group. When patient with AS were divided into 2 subgroups as patients with or without SVA, the Pd (16.2+/-5.0 vs 9.9+/-3.2, p=0.001), SAPWD (151.4+/-7.8 vs 98.7+/-16.1, p=0.001) and Bath ankylosing spondylitis disease activity index (BASDAI) (5.1+/-1.6 vs 3.7+/-1.0, p=0.014) were significantly greater in the subgroup with arrhythmias compared to the subgroup without arrhythmias. There was a strong positive correlation between BASDAI and SAPWD (r=0.622, p=0.001). There was also a moderate positive correlation between BASDAI and SAPWD (r=0.479, p=0.01). Conclusions: SVA were detected more frequently in AS than control group. SAPWD and Pd were prolonged in patients with AS. Clinical severity assessed with BASDAI had positive correlation with prolongation of SAPWD and Pd. (Figure Presented).

Database: EMBASE

37. An unusual appearance of stenosis on coronary angiogram: Primary pericardial angiosarcoma

Source: American Journal of Cardiology; Jun 2016; vol. 117

Publication Date: Jun 2016

Publication Type(s): Journal: Conference Abstract

Publisher: Elsevier Inc.

Author(s): Sag S.; Bedir O.; Gullulu S.; Aydinlar A.; Gungoren F.; Nas O.F.; Topal N.B.; Aytac I.I.K.

Abstract: Primary pericardial angiosarcoma is extremely rare tumour with a poor prognosis which is tend to metastasis. The patients usually refer to the cardiology department with the complaints of dyspnea ,angina, exercise intolerance, tachycardia, hemoptysis and cough. These symptoms commonly occur during the further terms of the disease. The symptoms may imitate coronary artery disease. Here, we present an angiosarcoma that narrows the mid segment of the right coronary artery outside-in. Case Report: 39 year-old-female referred to our cardiology department with the complaints of exertional dyspnea and fatigue for two weeks. The patient had not suffered from any disease except for the pericardiosynthesis which was performed a year ago due to the pericardial effusion of uncertain cause. On physical examination, her arterial blood pressure was 100/60 mmHg, juguler venosus distension, hepatomegaly which is 8 cm below the costal margin and pretibial edema was observed. Chest X-Ray revealed an increased cardiothoracic ratio. The 12-lead electrocardiogram showed sinus tachycardia and negative T waves in the inferior and lateral leads. Left ventricle function was evaluated as normal in echocardiogram. Left ventricle was concentric hypertrophic and the pericardium was rather thick. In addition, hyperechogenic tissue density is seen in right ventricle wall neighbourhood and lateral wall neighbourhood. Coronary angiography showed normal coronary vessel except an outside-in narrowing in the right coronary artery from the proximal area to the mid area. CT-Angiography showed a medium density tissue formation of which the diameter may approach to 4.5-5 cm in the pericardial area. It was observed that the mentioned formation infiltrated and narrowing the proximal and medium segments of right coronary artery. Surgery was suggested, because of narrowing of right coronary artery and constrictive pericarditis. Pericardium was thickened and a diffuse tumour which was extensively adherent was present. Pericardium was mildly excised and released. Unfortunately the tumor was unresectable and just incisional biopsy was performed. The result of the pathological examination was positive for CD31, CD34 and factor 8 that supports the diagnosis of angiosarcoma. Conclusion: We performed further

investigations on the patient of whom an atypical appearance was detected on the coronary angiography, and determined a primary pericardial angiosarcoma. The tumour had not been resected due to being invased and the patient was referred to the oncology department in order to administer a chemotherapeutic treatment. Primary pericardial angiosarcomas are rare, aggressive tumors with poor prognosis. This case had undergone pericardiosynthesis heretofore. The patient then remained unfollowed and therefore was diagnosed as advanced stage primary pericardial angiosarcoma. (Figure Presented).

Database: EMBASE

38. Cryoablation for the treatment of drug refractory symptomatic atrial fibrillation: A regional medical center experience

Source: Journal of Atrial Fibrillation; 2016; vol. 8 (no. 5); p. 19-22

Publication Date: 2016

Publication Type(s): Journal: Article

Publisher: CardioFront LLC

Author(s): Tonks R.; Sayed H.-T.-K.; Adams A.; Smith W.T.

Abstract: Introduction: PVI is an effective, guideline-based treatment for drug refractory symptomatic AF. Balloon cryoablation has been shown to be a safe and effective method for PVI. In the STOP-AF trial, data was produced from practitioners performing PVI with significant experience at high volume centers. This study evaluates the effectiveness and safety of treating symptomatic, drug refractory AF with PVI via cryoablation after implementation in a regional medical center. Method: This represents a retrospective analysis of outcomes after cryoablation treatment for AF in 71 patients over 354.7 +/- 164.4 days. Reported and recorded episodes of AF were categorized into a representative percent of AF "burden" for each 90 day period. Primary effectiveness and safety end points paralleled those of the STOP-AF trial. Results: Patients undergoing cryoablation had a 91% reduction of AF burden at 6 months following the procedure with an event-free survival rate of 45.5 % at a mean follow up of 12 months. The mean burden reduction was 3.21% per quarter. Anti-arrhythmic and anticoagulant medication use was reduced by 14.3% and 26.8% respectively. Significant complications included one report of pulmonary vein stenosis, one report of pseudoaneurysm and 5.5% of patients had transient pericarditis or pericardial effusion following the procedure. Conclusion: The results of this study were comparable to those of the high volume multi-center STOP-AF trial. PVI via cryoablation is a safe and effective alternative treatment of drug refractory symptomatic AF in the setting of a regional medical center.

Database: EMBASE

39. CEACAM1 and MICA as novel serum biomarkers in patients with acute and recurrent pericarditis

Source: Oncotarget; 2016; vol. 7 (no. 14); p. 17885-17895

Publication Date: 2016

Publication Type(s): Journal: Article

Publisher: Impact Journals LLC

Author(s): Markel G.; Galore-Haskel G.; Schachter J.; Besser M.; Adler Y.; Imazio M.; Koren-Morag N.; Cumetti D.; Maestroni S.; Brucato A.; Altman A.; Shoenfeld Y.

Abstract: Background: The immune response plays a significant role in pericarditis, but the mechanisms of disease are poorly defined. Further, efficient monitoring and predictive clinical tools are unavailable. Carcinoembryonic antigen cell adhesion molecule 1 (CEACAM1) is an immune-inhibitory protein, while MHC class I chain related protein A (MICA) and B (MICB) have an immune-

stimulating function. Methods and results: Serum CEACAM1, MICA and MICB concentrations were measured by ELISA in ~50 subjects of each group: acute pericarditis (AP), recurrent pericarditis (RP) and lupus (SLE) patients, metastatic melanoma patients as well as healthy donors. Serum CEACAM1 was dramatically elevated in AP and RP patients, but not in SLE patients, and displayed a highly accurate profile in ROC curve analyses. MICA and MICB were elevated in some pericarditis patients. All markers were enhanced in metastatic melanoma patients irrespective of neoplastic pericardial involvement. Etiology-guided analysis of RP patients showed that very low MICA levels were associated with idiopathic RP, while high MICA was associated with autoimmune and post-operative RP. Importantly, MICA was significantly associated with recurrences, independently of other potentially confounding parameters such as age, time of follow up or treatment modality. Conclusions: Here we report for the first time on CEACAM1 as a potentially novel biomarker for pericarditis, as well as on MICA as an innovative prognostic marker in these patients. Determination of the roles of these immune factors, as well as their diagnostic and prognostic values should be determined in future prospective studies.

Database: EMBASE

40. Echocardiographic parameters in clinical responders to surgical pericardiectomy - A single center experience with chronic constrictive pericarditis

Source: Indian Heart Journal; May 2016; vol. 68 (no. 3); p. 316-324

Publication Date: May 2016

Publication Type(s): Journal: Article

Publisher: Elsevier

Author(s): Patil D.V.; Sabnis G.R.; Phadke M.S.; Lanjewar C.P.; Kerkar P.G.; Mishra P.; Kulkarni D.V.; Agrawal N.B.

Abstract: Background Chronic constrictive pericarditis (CCP) is the end result of chronic inflammation of the pericardium. Developing countries continue to face a significant burden of CCP secondary to tuberculous pericarditis. Surgical pericardiectomy offers potential cure. However, there is paucity of echocardiography data in post-pericardiectomy patients vis-a-vis their clinical status. We studied the changes in multiple echocardiographic parameters in these patients before and after pericardiectomy. Methods Twenty-three patients (14 men, 9 women) who underwent pericardiectomy for CCP in the last 5 years (from January 2009 to December 2014) were subjected to detailed clinical and echocardiographic evaluation during the study period (between June 2013 and December 2014). Patients with residual symptoms of NYHA class II and below were considered as 'responders'. The data thus obtained were compared to the pre-operative parameters. Results After pericardiectomy, the incidence of vena caval congestion decreased from 100% to 15% ($p < 0.001$). There was significant reduction in the mean left atrial size from 39.33 +/- 10.52 mm to 34.45 +/- 10.08 mm ($p < 0.001$) and also the ratio of left atrium to aortic annulus from 1.93 to 1.69 ($p < 0.001$) among 'responders' to pericardiectomy. Septal bounce was observed to persist in 5 (25%) patients after pericardiectomy. There was significant respiratory variation of 39.23 +/- 15.11% in the mitral E velocity before pericardiectomy. After pericardiectomy, this variation reduced to 14.43 +/- 7.76% ($p < 0.001$). There was also significant reduction in the respiratory variation in tricuspid E velocities from 31.33 +/- 18.81% to 17.35 +/- 16.26% ($p < 0.001$). After pericardiectomy, the mean ratio of mitral annular velocities, medial e': lateral e', reduced from 1.08 to 0.87 ($p < 0.03$). The phenomenon of 'annulus reversus' was found to persist in 6 'responders', thereby reflecting a 50% reduction in its incidence after pericardiectomy ($p < 0.001$). The ratio of mitral E to medial e' (E/e') increased from 4.21 +/- 1.35 before pericardiectomy to 6.91 +/- 2.62 after pericardiectomy ($p = 0.001$). Conclusion Among clinical responders to surgical pericardiectomy, echocardiographic assessment revealed a significant reduction in vena caval congestion, LA size, ratio of LA to aortic annulus, septal bounce, respiratory variation in mitral and tricuspid E velocities, mitral annular medial e' and the

phenomenon of annulus reversus. Also, there was a significant rise in minimum tricuspid and mitral E velocities and the E/e' ratio.

Database: EMBASE

41. Imaging of Pericardial Diseases

Source: Seminars in Ultrasound, CT and MRI; Jun 2016; vol. 37 (no. 3); p. 238-254

Publication Date: Jun 2016

Publication Type(s): Journal: Article

Publisher: W.B. Saunders

Author(s): Cummings K.W.; Green D.; Johnson W.R.; Javidan-Nejad C.; Bhalla S.

Abstract: Given the widespread use of cross-sectional imaging modalities, specifically multidetector computed tomography and magnetic resonance, to evaluate thoracic disease, the pericardium is frequently imaged. Knowledge of the normal appearance and anatomical boundaries is vital for radiologists to avoid confusion with more sinister pathology. A variety of disorders and diseases of the pericardium can bring a patient to clinical attention from inflammatory conditions, resulting in pericarditis and pericardial effusion, to malignancy. This article discusses the anatomy and conditions that affect the pericardium, emphasizing the role imaging plays in diagnosis and management.

Database: EMBASE

42. Influenza related complications and deaths in Australian children: Seasonal surveillance 2008-2015

Source: Journal of Paediatrics and Child Health; May 2016; vol. 52 ; p. 13-14

Publication Date: May 2016

Publication Type(s): Journal: Conference Abstract

Publisher: Blackwell Publishing

Author(s): Zurynski Y.; Ridley G.; Phu A.; Elliott E.; Booy R.

Abstract: Background and Aims: Severe complications and deaths due to influenza in children were reported during the 2009 influenza pandemic.(1,2) There are few reports describing serious complications and deaths in children during non-pandemic years. We describe severe influenza complications and deaths in children during 2008-2015. Methods: National surveillance through the Australian Paediatric Surveillance Unit (APSU) 2008 to 2015, July to September each year, for children aged <15 years, admitted to hospital with severe complications of laboratory-proven influenza. Information about presenting symptoms, pre-existing chronic disorders, immunization, complications, treatment and outcome was reported by ~1600 paediatricians participating in APSU surveillance. Results: There were a total of 457 cases reported. Median age was 3 years (range: 0-14.8), and 56.5% were boys. Most 307 (67.2%) had influenza A. Complications included pneumonia (61.2%), encephalitis (13.3%), myocarditis/pericarditis (3.7%), shock (3.9%) and rhabdomyelysis (3.9%). Viral or bacterial coinfections were reported in 18%. Of the 457 children, 24 (5.3%) were vaccinated for influenza. 174 (38.1%) of children had chronic conditions predisposing for influenza, and of these, 15 (8.2%) were vaccinated. There were 21 deaths. The highest number of deaths was reported in 2012 (n = 6), 3 in 2009 and 2015, 2 in 2010 and 2013, 1 in 2008 and 2014. Among the 21 deaths, 11 (52.3%) had pre-existing conditions including cerebral palsy (n = 2); ulcerative colitis (n=1); and 8 had diagnosed or undiagnosed genetic syndromes. The other 10 (47.6%) children that died were previously healthy. Conclusions: Although rare, serious complications and deaths due to influenza occurred every year 2008-2015, including among previously healthy children. Given that of the 21 deaths, almost half of the children were previously healthy, there is a need for rapid diagnosis and treatment of children with influenza-like symptoms, and influenza vaccination should be

considered for all children. Among the 174 cases with pre-existing chronic conditions and admitted to hospital for influenza, only ~8%were vaccinated for influenza in the last 12 months. Children with chronic conditions that might pre-dispose them to severe influenza are recommended and funded under the National Immunisation Programme for annual influenza vaccinations. Health professionals should be vigilant to ensure that such children are vaccinated.

Database: EMBASE

43. Why do doctors prescribe dialysis? The peridialysis study

Source: Nephrology Dialysis Transplantation; May 2016; vol. 31

Publication Date: May 2016

Publication Type(s): Journal: Conference Abstract

Publisher: Oxford University Press

Author(s): Heaf J.; Petersons A.; Venere B.; Heiro M.; Povlsen J.V.; Rosenborg M.; Lokkegaard N.; Alonso-Garcia F.; Kampmann J.; Klyne N.; Randers E.

Abstract: Introduction and Aims: Chronic dialysis initiation presents many problems: unplanned start, increased peridialytic morbidity and mortality, and reduced modality choice. The Peridialysis study is an ongoing multi-center prospective analysis of clinical and biochemical peridialytic variables in >1000 patients aiming at better understanding of the causes and consequences of unsatisfactory dialysis initiation. One major factor may be physician motivation for dialysis start, a subject which has not previously been studied. Methods: Participating physicians register their primary reason for dialysis initiation, and secondary or other reasons. Choices include 17 clinical and 9 biochemical reasons. Variables include age, sex, renal diagnosis, 11 comorbid conditions, creatinine and eGFR at 6, 3 and 0 months before dialysis initiation, and terminal values for urea, potassium, bicarbonate, calcium and phosphate. Unplanned start is defined as use of a temporary central venous catheter or PD initiation <6 days after catheter insertion. Results: 76 doctors prescribed dialysis to 305 new patients. 20 different primary reasons were given, 35% biochemical, (primarily low GFR 11%, high urea 7%, high creatinine 7%) and 65% clinical (fatigue 20%, nausea 10%, pulmonary stasis 10%). 22% were life-threatening (pulmonary stasis 10%, hyperkalaemia 6%, dyspnea 3%, acidosis 1.6%, cardiac 1.3%, pericarditis 0.3%). 35% of secondary reasons were clinical. 17% had no clinical reason, and 17% no biochemical. 41% of first dialyses were unplanned, with no difference between biochemical & clinical groups. 62% of life threatening reasons were unplanned. Diabetics had more often primary clinical reasons, 75% vs 60% ($p < 0.05$), and primary clinical generally had more comorbid conditions (1.7 vs. 1.2). Similarly, comorbidity number was positively correlated to terminal eGFR ($r=0.19$, $p<0.01$). No effect of patient sex or age was seen. Terminal eGFR was higher for primary clinical than biochemical, 8.2 +/-3.8 vs 6.7 +/-3.3 ml/min (p=lt0.01). Highest eGFRs were seen for the clinical problems cachexia (10.2 ml/min) and pulmonary stasis (9.1 ml/min), and lowest for acidosis (3.5 ml/min) and oedema (6.7 ml/min). High creatinine was interpreted as 892 +/-461 vs 636 +/-244 muM, high urea as 45 +/-16 vs 32 +/-12 mM, low terminal eGFR as 6.1 +/-1.9 vs 8.3 +/-4.5 ml/min, hyperkalaemia as 5.9 +/-1.3 vs 4.3 +/-0.7 mM, acidosis as 13 +/-5 vs 22 +/-5 mM, low calcium ion as 0.93 +/-0.16 vs 1.14 +/-0.11 mM. No clear meaning was attached to the terms high phosphate and falling eGFR. Conclusions: There is considerable variation in the patients' clinical condition, and in physician motivation and interpretation of biochemical terms. Physician motivation is thus an independent clinical variable. The presence of comorbidity leads to an earlier start of dialysis on clinical grounds. The Peridialysis study is expected to provide valuable information concerning the peridialytic situation, and may lead to a reduction in the incidence of unsatisfactory dialysis initiation.

Database: EMBASE

44. Usefulness of Novel Immunotherapeutic Strategies for Idiopathic Recurrent Pericarditis

Source: The American journal of cardiology; Mar 2016; vol. 117 (no. 5); p. 861-866

Publication Date: Mar 2016

Publication Type(s): Journal: Review

Author(s): Lotan D.; Wasserstrum Y.; Fardman A.; Kogan M.; Adler Y.

Abstract: Idiopathic recurrent pericarditis (IRP) is a debilitating illness which leads to great suffering and multiple hospitalizations. Management of acute pericarditis and subsequent recurrences has evolved significantly as the use of colchicine-based strategies become more prevalent, yet there still remains a subset of patients who remain refractory to colchicine therapy, and these patients require prolonged corticosteroid (CS) therapy for the control of symptoms. Since the 1960s, there have been reports of successful management of these cases with immunosuppressive therapy. Current guidelines support the use of anakinra, intravenous immunoglobulins, and azathioprine for management of IRP, with the goals of both control of symptoms and withdrawal of CS. Recent reports supply evidence for both auto-inflammatory and autoimmune activity in these patients. We herein review the current available reports regarding the evidence regarding the pathophysiology and reported cases and case series of IRP cases managed with immunomodulation therapy.

Database: EMBASE

45. The clinical profile of kawasaki disease in algerian children: A single institution experience

Source: Journal of Tropical Pediatrics; Apr 2016; vol. 62 (no. 2); p. 139-143

Publication Date: Apr 2016

Publication Type(s): Journal: Article

Publisher: Oxford University Press

Author(s): Boudiaf H.; Achir M.

Abstract: Kawasaki disease (KD) in an acute vasculitis of unknown etiology. The epidemiological data available for Algerian patients remains insufficient. Objective: To describe the demographic, clinical features of children with KD and to identify the risk factors for developing coronary artery lesions (CAL). Methods: This retrospective study included children admitted with KD at the pediatric hospital in Algiers from January 2005 to December 2014. Results: One hundred thirty-three patients (82 boys and 51 girls) with a mean age of 31 months were identified. The most common sign was fever, rash, oral changes and conjunctivitis. The cardiac complications were CAL (22.5%), pericarditis (2%) and myocarditis (1.5%). The independent variable for prediction of CAL was duration of fever >10 days, male gender and platelet count >450 000/mm<ovid:sup>3</ovid:sup>. Conclusion: The incidence of cardiovascular complications is high. Knowledge of KD among Algerian pediatricians should be enhanced to guarantee appropriate treatment of this disease.

Database: EMBASE

46. Expression of immune-related genes of ducks infected with avian pathogenic Escherichia coli (APEC)

Source: Frontiers in Microbiology; 2016; vol. 7

Publication Date: 2016

Publication Type(s): Journal: Article

Publisher: Frontiers Research Foundation

Author(s): Li R.; Li N.; Zhang J.; Wang Y.; Liu J.; Cai Y.; Chai T.; Wei L.

Abstract: Avian pathogenic Escherichia coli (APEC) can cause severe disease in ducks, characterized by perihepatitis, pericarditis, and airsacculitis. Although the studies of bacteria isolation and methods of detection have been reported, host immune responses to APEC infection remain unclear. In response, we systemically examined the expression of immune-related genes and bacteria distribution in APEC-infected ducks. Results demonstrated that APEC can quickly replicate in the liver, spleen, and brain, with the highest bacteria content at 2 days post infection. The expression of toll-like receptors (TLRs), avian beta-defensins (AvBDs) and major histocompatibility complex (MHC) were tested in the liver, spleen, and brain of infected ducks. TLR2, TLR4, TLR5, and TLR15 showed different expression patterns, which indicated that they all responded to APEC infection. The expression of AvBD2 was upregulated in all tested tissues during the 3 days of testing, whereas the expression of AvBD4, AvBD5, AvBD7, and AvBD9 were downregulated, and though MHC-I was upregulated on all test days, MHC-II was dramatically downregulated. Overall, our results suggest that APEC can replicate in various tissues in a short time, and the activation of host immune responses begins at onset of infection. These findings thus clarify duck immune responses to APEC infection and offer insights into its pathogenesis.

Database: EMBASE

47. Durability after aortic valve replacement with the Mitroflow versus the Perimount pericardial bioprosthesis: A single-centre experience in 2393 patients

Source: European Journal of Cardio-thoracic Surgery; Jun 2016; vol. 49 (no. 6); p. 1705-1710

Publication Date: Jun 2016

Publication Type(s): Journal: Article

Publisher: European Association for Cardio-Thoracic Surgery

Author(s): Nielsen P.H.; Hjortdal V.; Modrau I.S.; Jensen H.; Kimose H.-H.; Terp K.; Poulsen S.H.; Smerup M.; Nielsen S.L.

Abstract:OBJECTIVES: This study compares the durability and risk of reoperation in patients undergoing aortic valve replacement (AVR) with either a Mitroflow or a Carpentier-Edwards (CE) pericardial bioprosthesis. Since AVR with bioprosthetic valves has increased progressively in recent years as compared to mechanical valves, especially in patients aged 60-70 years, there has been renewed interest in the long-term durability of current pericardial bioprostheses. METHODS: We compared 440 AVR with Mitroflow valves with 1953 AVR with CE pericardial valves implanted from 1999 to 2014 with regard to reoperation, reoperation for structural valve deterioration (SVD) and all-cause mortality. RESULTS: Ten-year freedom from explant of any cause was higher for CE Perimount (98 +/- 0.7%) than for Mitroflow (95 +/- 1.4%, P < 0.01). Reasons for explant for CE Perimount were SVD (n = 2), endocarditis (n = 8) and paraprosthetic leak (n = 10). The reasons for explant for Mitroflow were SVD (n = 11), endocarditis (n = 3) SVD and pericarditis (n = 1) and paraprosthetic leak (n = 2). Ten-year freedom from explant due to SVD was higher for CE Perimount (100%) than for Mitroflow (96%) (P < 0.01). In small aortic annuli (bioprosthesis size 19-21 mm), freedom from SVD at 10 years for CE Perimount and Mitroflow was 100 versus 96%, respectively. By multivariate analysis, it was found that bioprosthesis size was not a risk factor for SVD. The choice of valve type could not be demonstrated to influence long-term survival. CONCLUSIONS: The Mitroflow pericardial bioprosthesis provides less than optimal mid- and long-term durability compared with the CE Perimount pericardial valve, especially for small aortic diameter implants (19 and 21 mm). This study hereby confirms the existence of a real risk of valvular deterioration of the Mitroflow valve that might compromise the prognosis of the patients.

Database: EMBASE

48. Clinical and histopathological features of fatal cases with dengue and chikungunya virus co-infection in Colombia, 2014 to 2015

Source: Eurosurveillance; Jun 2016; vol. 21 (no. 22); p. 1-6

Publication Date: Jun 2016

Publication Type(s): Journal: Article

Publisher: European Centre for Disease Prevention and Control (ECDC) (ECDC, Stockholm 171 83, Sweden. E-mail: eurosutveiliance@eecdc.europa.eu)

Author(s): Mercado M.; Acosta-Reyes J.; Navarro E.; Parra E.; Pardo L.; Rico A.; Campo A.; Viasus D.

Abstract: We report clinical features and histopathological findings in fatal cases with dengue (DENV) and chikungunya (CHIKV) co-infection identified at the Colombian National Institute of Health between September 2014 and October 2015. Seven such cases were documented. Dengue serotype 2 virus was identified in six cases. All patients were adults and comorbidities were present in four. Fever, arthralgia or myalgia was present in all cases. The frequency of rash, haemorrhage, oedema, and gastrointestinal symptoms was variable. Laboratory findings such as thrombocytopenia, renal failure, and leukocyte count were also inconsistent between cases. Post-mortem tissue examination documented focal hepatocellular coagulative necrosis in three cases, incipient acute pericarditis in one and tubulointerstitial nephritis in one. This study provides evidence of mortality in patients with DENV and CHIKV co-infection. Fatal cases were characterised by variable clinical and laboratory features. Evaluation of histopathology of autopsy tissues provided evidence of the pathological consequences of the disease.

Database: EMBASE

49. Hypercalcemia-induced pancreatitis presenting with acute ST-elevations mimicking a myocardial infarction

Source: American Journal of Emergency Medicine; Jun 2016; vol. 34 (no. 6); p. 1187

Publication Date: Jun 2016

Publication Type(s): Journal: Short Survey

Publisher: W.B. Saunders

Author(s): Nahass M.; Sharma R.; Penn J.

Abstract: In the emergency department setting, new onset ST-segment elevationswith concurrent chest or epigastric pain typically indicate an acute coronary syndrome. ST-segment elevations can also been seen in a number of other conditions, such as pericarditis, coronary vasospasm, or increased intracranial pressure [1]. An uncommon but increasingly cited cause of ST-segment elevations is hypercalcemia. The cases of hypercalcemia-induced ST-segment elevations have had various causes including malignancy, supplements, thiazide diuretic use, and primary hyperparathyroidism, none of which are associated with concurrent chest or epigastric pain. We report the first case of hypercalcemia induced pancreatitis presenting with ST-segment elevations.

Database: EMBASE

50. Diagnostic and prognostic utility of cardiovascular magnetic resonance imaging in heart failure with preserved ejection fraction

Source: Heart; May 2016; vol. 102

Publication Date: May 2016

Publication Type(s): Journal: Conference Abstract

Publisher: BMJ Publishing Group

Author(s): Kanagala P.; McAdam J.; Marsh A.M.; Squire I.B.; Ng L.L.; McCann G.P.; Cheng A.S.H.

Abstract: Purpose Heart failure with preserved ejection fraction (HFpEF) is a poorly characterised condition. We aimed to phenotype patients with HFpEF using multiparametric stress cardiovascular magnetic resonance imaging (CMR) and assess the relationship to clinical outcomes. Methods and Results Patients were recruited as part of an observational, single-centre, cohort study. Inclusion criteria were: clinical or radiographic evidence of heart failure (HF) and ejection fraction > 50% on transthoracic echocardiography (TTE). Exclusion criteria were: myocardial infarction (MI) in the preceding 6 months, suspected or confirmed cardiomyopathy/ constrictive pericarditis, non-cardiovascular life expectancy < 6 months and severe valve/ lung/ renal disease. Patients labelled as HFpEF (n = 154, 51% male, mean age 72.4 +/- 10 years) underwent TTE and CMR during a single study visit. The CMR protocol comprised cine, stress/rest perfusion and late gadolinium enhancement imaging on a 3-Tesla scanner. Follow-up outcome data (death or HF hospitalisation) was captured after a minimum of 6 months. CMR detected previously undiagnosed pathology in 42 patients (27%), who had similar baseline characteristics to those without a new diagnosis (see Table 1). These diagnoses consisted of: coronary artery disease (n = 20, including 14 with 'silent' MI), microvascular dysfunction (n = 11), probable or definite hypertrophic cardiomyopathy (n = 10) and constrictive pericarditis (n = 5). Four patients had dual pathology. During followup (median = 623 days), those patients with a new CMR diagnosis were at higher risk (see Figure 1) of adverse outcome for the composite end-point (hazard ratio log rank test: p = 0.047). In multivariate analysis, the 'new CMR diagnoses' group remained an independent predictor of outcome (hazard ratio: 1.92; 95% CI: 1.07 to 3.45; p = 0.03). Conclusion Stress CMR diagnosed new significant pathology in 27% of patients with HFpEF and these patients were at increased risk of death and HF hospitalisation. Conflicts of interest On behalf of all authors, there are no conflicts of interest to declare. (Table Presented) .

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