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"An 80-year-old female Ebstein's anomaly patient with a history of psychiatric illness in her male offsprings"

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Case abstract

An 80-year-old female presented to Kaski Sewa Hospital, Pokhara, Nepal on October 16, 2012 with palpitation and dyspnea of New York Heart Association functional class III, and the investigations revealed that the patient had Ebstein's anomaly with concomitant atrial fibrillation with fast ventricular rate. This is probably the eldest surviving patient of Ebstein's anomaly presenting for the first time with cardiac symptoms at the age of 80 years. The case is also unique in that her sons were suffering from the psychiatric illness, but she was not suffering from any significant psychiatric illness. Among her four sons, the first son was of 52 years, who developed recurrent depressive disorder at the age of 38 years; the second son was of 48 years, who developed schizoaffective disorder at the age of 38 years; the third son committed suicide at the age of 45 years, which could be due to major depressive episode and the fourth son was of 36 years of age, not showing any major psychiatric illness so far. However, her two daughters did not have any psychiatric illness. There are case reports of occurrence of Ebstein's anomaly in offsprings following consumption of lithium during pregnancy by mother. However, no cases have been reported where children of patient with Ebstein's anomaly have suffered from psychiatric illness. This case is, therefore, notable on two counts: firstly, the late age of presentation of cardiac problem and secondly, the occurrence of psychiatric illness in the male offsprings of the patient.

Keywords: Ebstein's anomaly, psychiatric illness, cardiac symptoms

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Pumonary Thromboendarterectomy for Severe Pulmonary Hypertension due to Chronic Pulmonary Emboli.

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Case abstract

Pulmonary artery hypertension due to chronic pulmonary embolism is a grave prognostic marker much worse than that with Eisenmenger's syndrome. The condition is said to be common but underdiagnosed even in developed world. Once the mean pulmonary pressure in patients with the disease reaches 50 mmHg or more, the 3 year mortality rate approaches 90%. Pulmonary thromboendarterectomy provides immediate and permanent relief of pulmonary hypertension associated with sequelae of unresolved pulmonary thromboembolic disease.

36 years old male presented with shortness of breath, NYHA III with one episode of syncope. CT angiography and echo revealed chronic pulmonary emboli with severe pulmonary hypertension. He underwent pulmonary thromoboendarterectomy on February 10, 2012 under deep hypothermic circulatory arrest. Post op course was unremarkable except for a minor reperfusion injury of right lung. He was discharged from hospital on 8th post day. Now he is in NYHA class 1, doing his regular job without having any symptom.

We believe this is the only pulmonary thromboendarterectomy done so far in the country.

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SVG- PCI in Acute MI

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Case abstract

Primary percutaneous coronary intervention for Acute Myocardial Infarction is now an established method of treatment and has great success rates in expert hands. Percutaneous coronary intervention of venous grafts especially in the setting of acute thrombotic occlusion may not have great results. The major factor is distal embolization of atherothrombotic debris resulting in no-reflow and periprocedural Myocardial Infarction. Risk can be estimated by angiographic estimates of plaque volume, extent of saphenous venous graft degeneration and by the presence of thrombus. A pooled analysis of five randomized clinical trials demonstrated no reduction in risk with glycoprotein (GP) IIb/IIIa inhibitors administered during saphenous venous graft percutaneous coronary intervention. Embolic protection devices are now recommended to improve the results of saphenous venous graft percutaneous coronary intervention.

The American College of Cardiology/American Heart Association/Society for Cardiovascular Angiography and Interventions 2005 guideline update for percutaneous coronary intervention gives a Class Ib recommendation for the use of Embolic protection devices during saphenous venous graft percutaneous coronary intervention when technically feasible. Likewise, the European Society of Cardiology Guidelines for PCI gives Embolic protection devices a class Ia recommendation for saphenous venous graft percutaneous coronary intervention. In absence of availability to Embolic protection devices, it may be challenging to handle an acutely closed saphenous venous graft.

Here, a case is described where the patient had undergone coronary artery bypass graft 18 years ago and presented with non ST elevation myocardial infarction. The coronary angiogram revealed a thrombotic occlusion of saphenous venous graft to obtuse marginal branch. DPD was not available.

After crossing the lesion with an All Star guide wire, thrombosuction was made with 6f Medtronics Export aspiration catheter. The lesion was pre-treated with intra coronary nitroprusside and then stented with Resolute 2.75 x 18 mm coronary stent. TIMI 3 flow was achieved and patient was discharged in a stable condition.

In absence of a DPD, a good thrombus aspiration and pre treatment of coronary vasodilators may be of use in acute management of saphenous venous graft closure.

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Scorpion sting induced reverse Tako Tsubo Cardiomyopathy

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Case abstract

Myocarditis due to scorpion bite is a rare etiology. We report a 16 year girl who presented to the emergency department seven hours after being stung by a scorpion in right ring finger.

On presentation, patient had tingling sensation at that site, breathlessness, frothy sputum and vomiting, since two hours of sting. On examination, she was pale, disoriented, perspiring and dyspnoeic. Vitals were: blood pressure 70/40 mmHg, respiratory rate 56/min, pulse rate 140/min, regular, temperature 37.2°C and oxygen saturation 72% without O2 and 85% with O2. Respiratory system examination disclosed bilateral basal coarse crepitations. Cardiovascular system examination revealed S3 gallop at the apex. Examination of right ring finger revealed mild edema and erythema. Laboratory investigations showed: sodium 139 mEq/L, potassium 3.5 mEq/L, urine analysis normal, hemoglobin 11.5 g/dl, WBC 17600 /mm3, polymorphs 74%, platelets 212000/mm3, blood sugar 6.7 µmol/L, urea 9.1 µmol/L, creatinine 117 µmol/L, serum calcium 1.4 µmol/L, albumin 28.5 g/L, SGOT 87 IU/L, SGPT 38 IU/L, CPK-total 540 IU/L, CPK-MB 53 IU/L, Troponin-I Negative. Electrocardiogram on second day showed T-wave inversion in Lead I, aVL, V1-5. Chest radiograph showed bat-wing appearance suggestive of acute pulmonary edema. Echocardiography showed left ventricular ejection fraction of 25% with mid-ventricular hypokinesia with preserved basal and apical segments. Patient was treated with oxygen, intravenous frusemide, enalapril, oral potassium supplements, dobutamine and nitroglycerine. On fourth day of admission, chest radiograph showed improvement in air space opacification. Patient continued to improve and was discharged on tenth day of admission in stable condition. Echocardiography before discharge showed ejection fraction of 60% and chest radiograph showed marked improvement of lung edema.

Scorpion bite induced myocarditis has been occasionally reported in literature. But reverse Tako Tsubo cardiomyopathy due to scorpion bite is a rare manifestation.

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An eye opener for the cardiologist ??

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Case abstract

A 35 years old male presented with multiple episodes of presyncope for five years. It wasn't associated with loss of consciousness, palpitation, vomiting or loss of balance but was aggravated during exertion. Loss of hair and puffiness of face is present for one year. Persistent sleepiness and loss of energy is also present.

Patient was diagnosed hypertensive 5 years back and propranolol 20mg was started. The patient developed dizziness on the very next day. He was diagnosed drug induced bradycardia (heart rate 32 per minute) where patient was treated with injection atropine and was discharged with tablet isoprenaline 10mg thrice daily. However, the dizziness did not improve. The patient visited many hospitals and took isoprenaline for 5 years without any improvement.

Patient underwent Holter monitoring which showed average heart rate of 52/min, 887 pauses (longest 4.7 sec). Similarly Electrocardiogram showed sinus bradycardia, QT prolongation (0.61sec), frequent pauses (>1.4 sec).

Finally he was advised permanent pacemaker insertion and was referred to our hospital. When he came to our out patient department, in view of hoarse voice and puffy voice we suspected hypothyroidism. Deep tendon reflexes showed delayed relaxation of ankle reflex.

Thyroid function test showed: FT3: 49ng/dl (normal 80-200), FT4: 1.3microgram/dl (normal 5.1-14.1), TSH>100microIU/ml (normal 0.27-4.2)

Patient was started levothyroxine therapy and symptoms gradually subsided. After 2 months, ECG showed heart rate= 66/min, QT interval= 0.4sec with no pauses.

Holter showed, average heart rate of 75/min, 15 pauses longest measuring 3.8 sec.

FT3= 2.99pg/ml (normal 2-4.4), FT4= 0.87 ng/dl (normal 0.93-1.7) ,TSH= 37.8 microIU/ml .

Thus, this case illustrates the importance of thyroid hormone work up in cases with bradycardia induced presyncopal attack with ECG changes (frequent pauses with QT prolongation).

A rare case of Systemic Lupus Erythematosus presenting as Cardiac Tamponade

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Skin and musculoskeletal system involvement are the most common presentations in systemic lupus erythematosus(SLE). Cardiac involvement occurs in one half of cases in SLE. Pericarditis with pericardial effusion is the most common cardiac manifestations. However, pericardial effusion causing cardiac tamponade are uncommon in patients with SLE. This paper reports a case of SLE presenting for the first time in cardiac tamponade, which is a rare manifestation of SLE.

A 20 years lady, a diagnosed case of Rheumatic Heart Disease (RHD) with moderate mitral stenosis, in her third postpartum month was referred to us with 2 months history of gradual swelling of whole body and shortness of breath on exertion (NYHA class III). Physical examination revealed a pulse rate of 140/min and blood pressure of 80/60 mm of Hg. Other significant findings were pulsus parodoxus and raised JVP with rapid X descent and absent Y descent. Cardiovascular examination revealed cardiomegaly with muffled heart sounds. Her hemoglobin was low with normal urea and creatinine. Her chest X-Ray showed enlarged cardiac silhouette with bilateral minimal pleural effusion. Electrocardiogram showed sinus tachycardia with low voltage in limb leads. Echocardiography showed massive pericardial effusion with evidence of cardiac tamponade. Immediate pericardiocentesis was done and about 400 ml of fluid was drained via pigtail catheter.

She was empirically started on anti tubercular medications with steroids but she did not improve. She developed an episode of generalized tonic clonic seizure. Her repeat urine examination showed 2+ protein. ANA and anti ds DNA were strongly positive. So, diagnosis of SLE with pericarditis, lupus nephritis and cerebritis was made. Anti Tubercular medication was stopped and was treated with IV methyl prednisolone 500 mg once daily for 3 days, and later on put on maintenance oral dose. She gradually improved and was discharged with marked improvement of symptoms.

Our case presented with some uncommon features of SLE. Skin and joint involvement, which are the most common features of SLE, was never present in our case. She had three relatively uncommon features of SLE in form of involvement of heart, kidney and central nervous system at the initial presentation. To best of our knowledge, no such case has been reported in literature which had involvement of three major organs without skin and joint involvement and presenting as cardiac tamponade at first time.

Cardiac tamponade is an uncommon presentation of SLE. Diagnosis of SLE is sometimes difficult in absence of typical manifestation like skin and joint involvement. Presentation in cardiac tamponade in absence of skin and joint involvement is a rare presentation of SLE.

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