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# Case of Filarial Pericardial Effusion Presented as Cardiac Tamponade in Medica Heart Institute, Patna, Bihar

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#### **ABSTRACT**

Case of filarial pericardial effusion is reported for its rarity. Pericardial effusion is a common problem aetiolgy varies demanding meticulous clinical and laboratory work up. Parasitic infections are rare cause of pericardial effusion and are generally haemorrhagic and are treatable with specific drug therapy. One such case presented with cough and breathlessness for 1 and half months with history of fever presented in Medica heart institute, Patna. Pericardiocentesis was done and send to the lab for further investigation Fluid examination revealed microfilaria of Wuchereria bancrofti. Patient was advised diethyl carbamazine, ivermectin, albendazole and called after 3 week.

**Key Word:** Pericardial Effusion, Filaria, Wuchereria Bancrofti, Leishman Stain, Diethylcarbamazine.

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#### CASE REPORT

Lymphatic filariasis is common in tropical countries with most infections caused by W. Bancrofti. Microfilaria is not only confined to lymphatic system but also associated with other organs, subcutaneous tissue & serous cavities like pericardium and pleura.

#### CASE PRESENTATION

28 Year male resident of Bhagalpur, Bihar non hypertensive, non-diabetic presented to the hospital with complaints of cough for 1 and half month, along with fever and shortness of breath. Pericardial effusion is a common problem but it needs proper laboratory workup for proper etiological diagnosis. Patient was admitted and after routine test. Echocardiography was done which showed massive pericardial effusion with normal LV function. X-ray also showed massive pericardial effusion Pericardiocentesis was done. Fluid was sent for cytology in the laboratory. Approx 60ml of pericardial fluid was sent to the lab. Appearance was haemorrhagic. Pericardial fluid was about 60ml, haemorrhagic, alkaline, glucose 30mg/dl with protein 6.50gm/dl. Proper smear was prepared on clean glass slide and stained with leishman stain

& field stain. Multiple smear studied showed microfilaria of Wuchereria bancrofti². Cell count of 4300 cells/cumm (Lymph 40%, Neutrophil-60%) was observed. Reactive mesothelial cells in clusters were seen. Patient was treated with diethylcarbamazine, ivermectin, albendazole and called after 3 weeks.¹ Serial chest X-ray and echocardiography showed resolution of pericardial effusion over a period of 6 weeks.

#### DISCUSSION

Pericardial effusion has diverse aetiology and is most commonly associated with viral, tuberculosis, lymphoma. Parasitic infection in pericardial effusion is very rare and very few cases has been reported till date. Mukherjee et al reported a filarial case in Pericardial effusion in 1963.¹ Chakraborty et al reported another case of filarial pericardial effusion who was also treated with DEC for 4 weeks.² In 1975 Samantray et al showed microfilaria in both pericardial fluid and blood.³ In 2013 Manish Sharma et al reported a case of filarial pericardial effusion with cardiac tamponade and was treated with pericardiocentesis and diethylcarbamazine.⁴ Sinha et al reported a case of filarial pericardial effusion.⁵

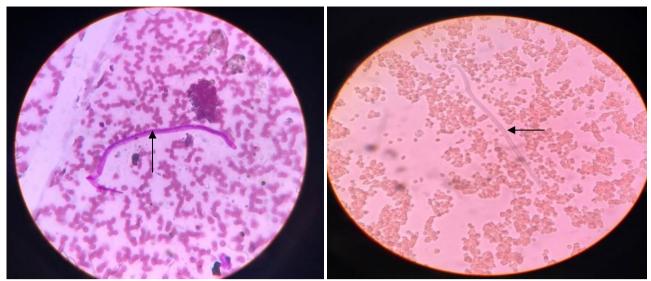


Fig 1,2: Smears showing microfilaria

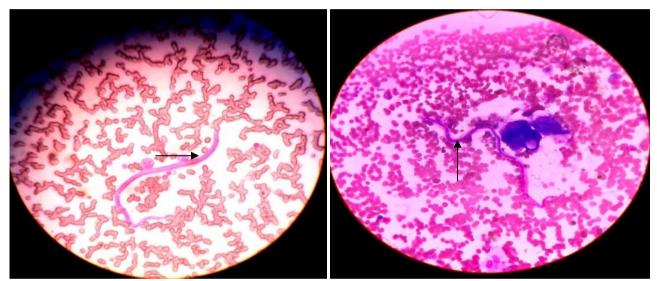


Fig 3,4: Slides showing microfilaria

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