Although transthoracic echocardiography was unremarkable, transoesophageal echocardiography revealed a fibrin sheath and vegetations in superior vena cava-right atrium junction, which was the site of the tip of a central catheter that had been removed 2 months prior, consistent with fibrin sheath-associated endovascular infection” Sheikh et al (2017).

Abstract:

Chronic indwelling central venous catheters can result in formation of fibrin sheaths increasing risk of occlusion, thrombosis and infection. Endovascular infection of right-sided heart structures induced by such sheaths is very rare. A 48-year-old woman with end-stage renal disease initially treated for diabetic ketoacidosis developed persistent Staphylococcus epidermidis bacteraemia without an identifiable source. Although transthoracic echocardiography was unremarkable, transoesophageal echocardiography revealed a fibrin sheath and vegetations in superior vena cava-right atrium junction, which was the site of the tip of a central catheter that had been removed 2 months prior, consistent with fibrin sheath-associated endovascular infection.

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The bacteraemia cleared and clinical improvement was seen with prolonged intravenous vancomycin. In patients with unexplained bacteraemia and history of a central catheter, rare causes of endovascular infections of right-sided heart structures like fibrin sheaths should be considered. These can persist months after catheter removal. Transoesophageal echocardiogram should be used for earlier detection.

Reference:

BMJ Case Reports. April 17th.

doi: 10.1136/bcr-2016-219060.

Thank you to our partners for supporting IVTEAM