



***Trichosporon inkin* causing intraluminal conduit vegetation from Right ventricle to main Pulmonary artery extending till hilar branch pulmonary arteries-treated with Surgery followed by antifungal medications - A case report**

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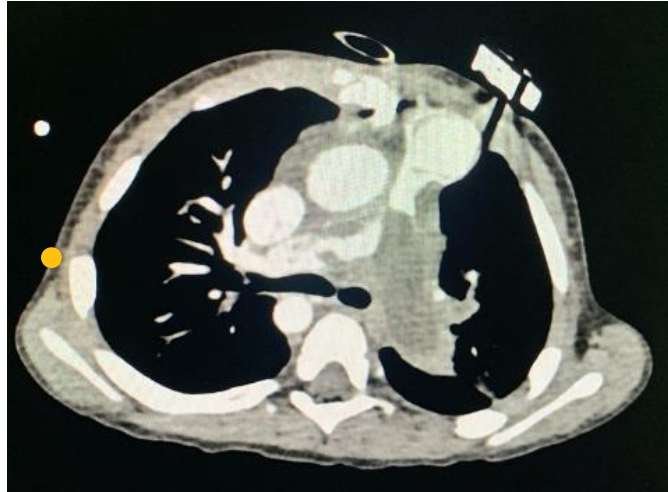
Introduction

Trichosporon species are basidiomycetous yeast like anamorphic organisms that are widely distributed in nature and found predominantly in tropical and temperate areas. This fungal species is a part of commensal flora of skin and mucosa occasionally. It causes white piedra i.e the superficial infection of the hairs, invasive infections are rare and seen mostly in immunocompromised hosts¹. Here we are reporting a case of RV-PA conduit infection in an immunocompetent child.

Observation

A 2 year old child who is a case of Tetralogy of fallot and had undergone RVOT stenting in his initial one month of life had come for Intracardiac repair. CT pulmonary Angiogram was done and the decision to go ahead with ICR and a RV-PA conduit

was undertaken. Child underwent ICR with 14 mm e-PTFE RV to PA conduit placement on 27th November 2024, Child had an uneventful post op course and was discharged .The child was lost to follow up and he came with the complaints of fever for 15 days for which he was already admitted for a period of 7 days and had received antibiotics to which he has not responded and hence was referred to us. A 2D-ECHO was done which had shown a suspicion of RV to PA conduit large vegetation with the RVOT gradient of 120 mmHg, mild conduit regurgitation with good flows in branch PAs and moderate TR.A CT pulmonary angiography scan was done to confirm the presence of large vegetation in the conduit. antibiotics amikacin, vancomycin, and mphotericin B were started and the decision to go ahead with the surgery to remove vegetations and conduit replacement was taken



Axial and sagittal section showing the vegetation in the lumen of the conduit progressing up to branch Pulmonary arteries.

Surgical management

Redo median sternotomy was done, keeping innominate artery exposed and looped, adhesions removed and heparinisation done, Ao-RA

cannulation done, RPA dissected and looped, conduit dissected, clamps applied and conduit was cut between the clamps, vegetations were seen filling the whole conduit extending till RPA and LPA hilar branches, vegetations removed and

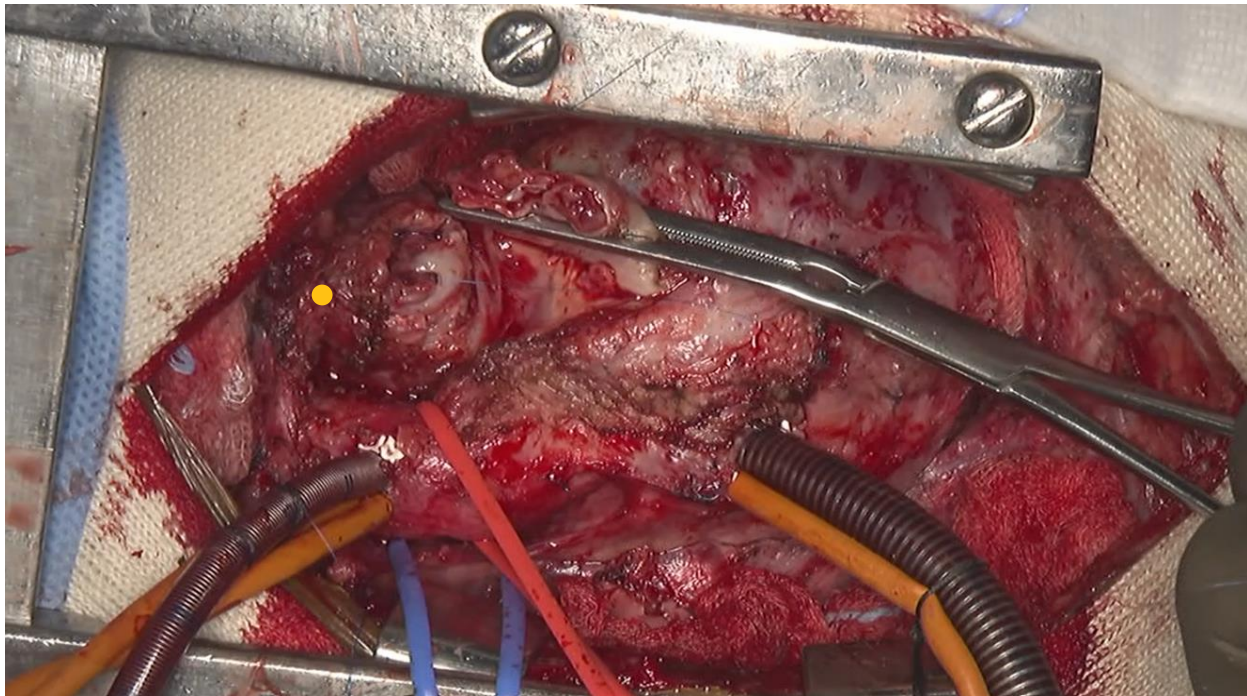
thorough antibiotics wash given, vegetations from the RV end removed, conduit insitu was removed, vegetations and conduit were sent for culture and antibiotic sensitivity. RV – PA contegra 16mm conduit anastomosed to proximal and distal ends using 7-0 9 mm prolene suture in continuous manner, left pleural drain and 2Atrial pacing wires were placed, gradual weaning of bypass done, MUF done, protamine given .RA decannulation done, aortic decannulation done, 1v pacing wire placed. pericardial and mediastinal drain placed.

Hemostasis checked. Routine sternal and skin closure done.

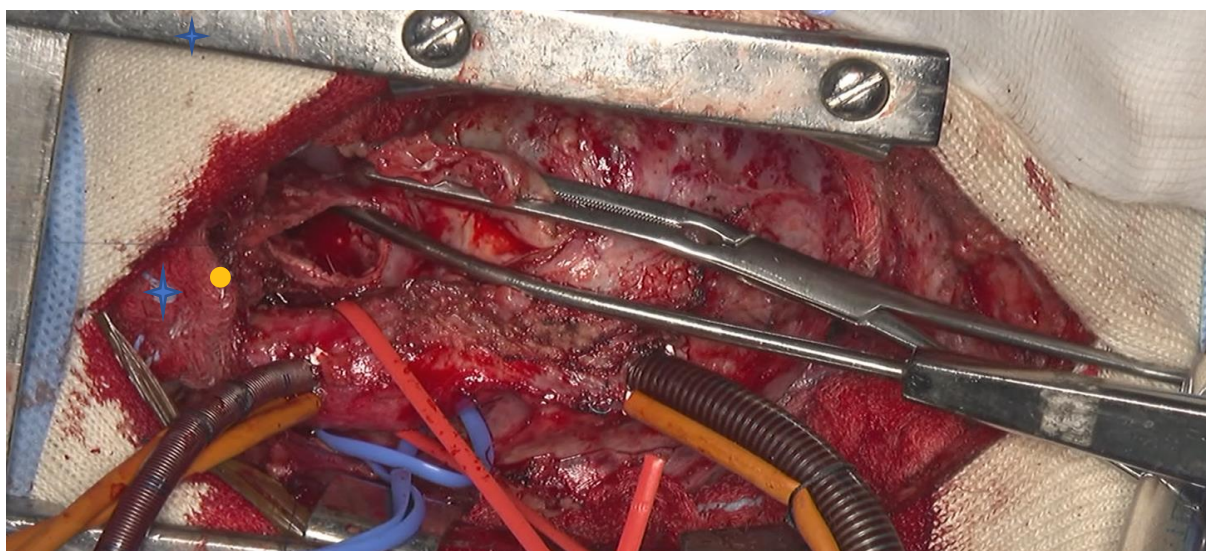
Intra Op Epicardial ECHO: mild MR, No RVOTO. RPA and LPA shows free flow of blood., Normal Biventricular function.

Pre op CVP-19 mmHg ,post op CVP-10 mmHg, RV pressure was checked which was 2/3rd of systemic.

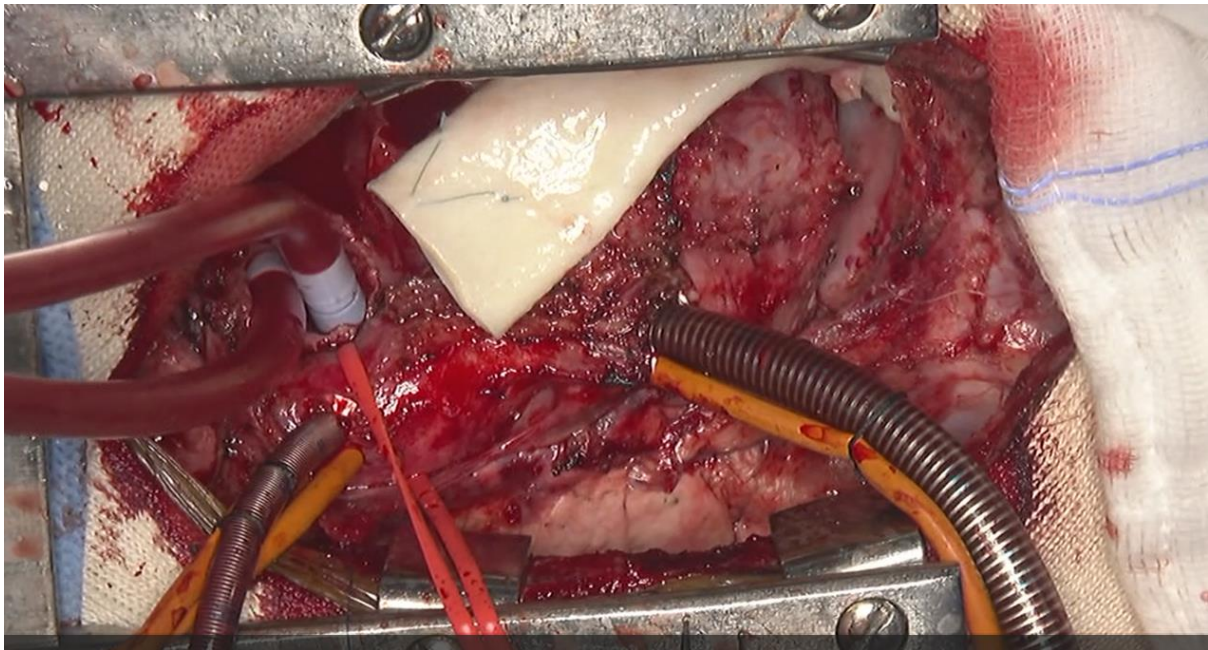
Total CPB time of 225 minutes



After removing the conduit, whole of the distal Pulmonary artery seen filled with the vegetation, clamped part is proximal Pulmonary artery.



In the process of clearing the vegetations from pulmonary artery bifurcation site,



16 mm contegra just before anastomosis with cleared Pulmonary arteries.

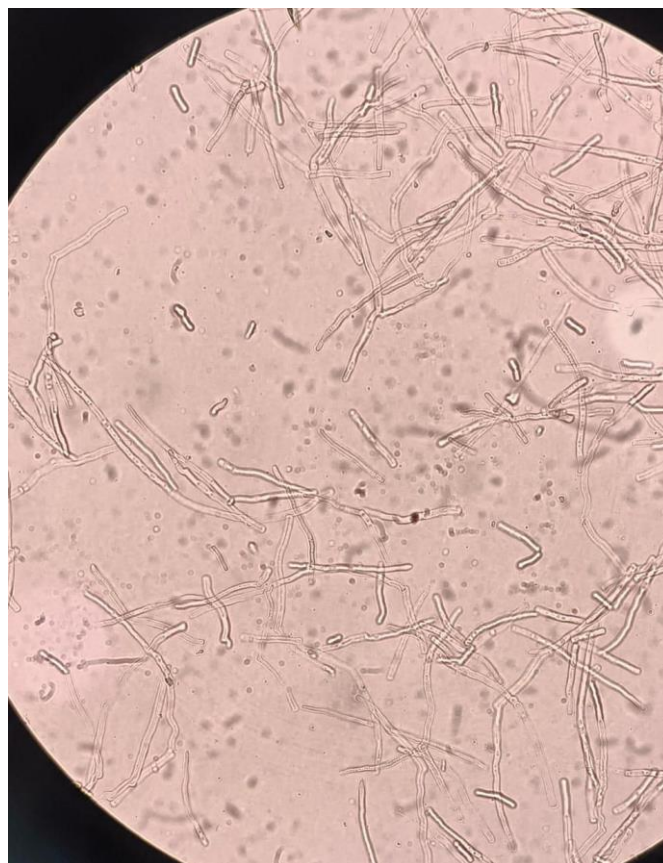
Post op Course:

Culture sensitivity report came positive for Trichosporon inkin which was sensitive to Amphotericin B, child started on inj amphotericin

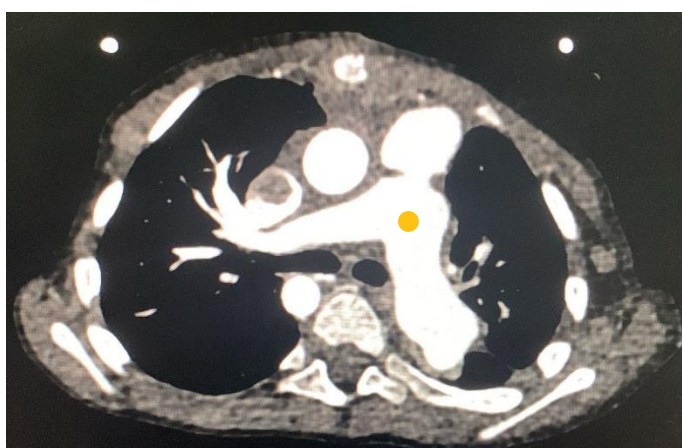
B and Tab.voriconazole, after the initial few days of fever. child remain afebrile and maintained good appetite in the hospital.



Dry, wrinkled cream to whitish colored colonies of Trichosporon on 5% sheep blood agar Single celled hyaline arthroconidia of Trichosporon



Single celled hyaline arthroconidia of Trichosporon



Post op CT scan showing opened up RVOT and RPA and LPA post vegetation removal.

References

1. Jannic A, Lafaurie M, Denis B, Hamane S, Metivier F, Rybojad M, et al. Trichosporon inkin causing invasive infection with multiple skin abscesses in a renal transplant

patient successfully treated with voriconazole. JAAD Case Reports. 2018 Jan;4(1):27–9.