We present a coats disease in a young boy with a stage 3 disease. He was treated effectively with laser, cryotherapy and surgery. It is not reported in our country till now. It is essential to rule out aggressive eye cancer (retinoblastoma) before initiating any treatment as both can have similar presentation.

KEYWORDS: Coats disease; Cryotherapy; Exudation; Laser; Telangiectasia.
The patient was followed up at day one and day seven. During first followup the visual acuity in RE was 5/60. The cornea, anterior chamber depth and lens were unremarkable. Retina was attached though there was few pockets of subretinal fluid at posterior pole. On follow up one week, visual acuity in RE improved to 6/36 and retina was attached. The patient was asked to follow up after three months but patient did not turn up for followup.

DISCUSSION

Coats disease predominantly affects male population and it has unilateral presentation in most of the cases. It is staged into five categories as stage 1 (Retinal telangiectasia only), stage 2 (telangiectasia with exudation), stage 3 (Exudative retinal detachment), stage 4 (stage 3 with glaucoma) and stage 5 (Advanced end stage disease). The treatment is indicated only in foveal exudation, exudative retinal detachment, leaking vessels and neovascular glaucoma.

In a study by P Rishi et al, retinal attachment after external subretinal fluid drainage along with cryotherapy was achieved in 57%. In our case retina was completely attached at one week follow up but it needs long term follow up to completely cure the disease. In some studies selective laser photocoagulation over the telangiectatic vessels was effective in resolution of subretinal fluid drainage along with cryotherapy. In our case the procedure involved external subretinal fluid drainage with fluid infusion via anterior chamber maintainer along with laser and cryotherapy. It is a simple technique except that the procedure has to been done under general anaesthesia. In a article by Desai SR, coats disease with bullous exudative retinal detachment was effectively managed with external subretinal fluid drainage along with cryotherapy. It was a similar technique that we have managed in our case except that we did not use injection bevacizumab and active aspiration of subretinal fluid
with cutter. Similarly external drainage of SRF alone versus SRF drainage combined with pars plana vitrectomy proved more effective in the latter option of treatment. However in our case external SRF drainage alone was effective in settling the retina. It is essential to differentiate between retinoblastoma and coats disease. Retinoblastoma will present as whitish fluffy mass in the retina either as endophytic or exophytic growth. The ultrasound B scan and CT scan will show hyperreflectivity due to high calcium content of the mass. The subretinal fluid analysis will show malignant cells in cytology. In histopathology, findings like fleurettes, Flexner -wintersteiner rosettes and Homer wright rosettes point towards retinoblastoma. In coats disease retinal telangiectasia and extensive exudation are hallmark of the disease. High calcium content and malignant cells are not seen in coats disease.

It was never reported in our country till date. This case report can serve as baseline reference for future research too.

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REFERENCES