Introduction: Choroidal neovascularization (CNVM) is an important cause of visual impairment in pediatric age group. The CNVM in children has different causes from that of adults; maculopathies in children can cause CNVM such as best disease and inflammatory diseases, we are presenting 2 cases of CNVM in children.

CASE (1)
A case of seven-year old girl presented with decreased vision in both eyes. Examination showed visual Acuity (right eye 6/12, left eye 6/18), normal anterior segments, fundus showed right active CNVM in the macular area and left macular scar (Fig 1) which was confirmed by Optical Coherence Tomography (OCT) (Fig 2). Fundus Fluorescein Angiography (FFA) (Fig 4), the etiology of which could not be identified. She was treated with intravitreal injections of Ranibizumab (Lucentis). Over a course of one and half year follow-up she had multiple recurrences in both eyes that necessitated further injections, five injections each eye, last injection was in July 2015. Screening of the family showed bilateral VNVM maculopathy in a 5-year old brother. Electrophysiological testing of the patient and her brother showed abnormal electro-oculogram (EOG) and reduced macular and cone responses both eyes (Fig 5, 6).

CASE (2)
Thirteen-year old girl who presented with left eye decreased vision that she discovered accidently. There is no family history of any ocular disease. Examination showed right eye vision 6/6 unaided, normal IOP, normal anterior and posterior segment. Left eye vision close counting fingers (CCF), normal IOP, and anterior segment, there was serous macular detachment with raised whitish super-temporal peripapillary scar (Fig 8, 9), and OCT showed elevated disc margin OS (Fig 10). Autofluorescence and B-scan examination excluded the presence optic nerve drusen (Fig 11, 12). All blood investigations including serology to rule out any inflammation were normal, chest x-ray was normal. She was diagnosed as idiopathic peripapillary CNVM which regressed spontaneously over 2 months (Fig 13).

Discussion: CNVM in children has different etiologies from that affecting Adults. In children, etiology of CNVM can be classified in to 3 categories: (A) Inherited conditions: like macular dystrophies, myopia, and Angioid streaks, (B) Acquired conditions like ocular inflammation i.e. retinal choriditis or post-traumatic, (C) Idiopathic CNVM. In case 1 the diagnosis of Best’s disease could not be reached at the beginning because of the late presentation of the case i.e. in the scoring stage. It was made only after the examination of the brother and was confirmed by the electrophysiological testing in the past CNVM used to be treated with laser photocoagulation, photodynamic therapy, transpupillary Thermo-coagulation, or surgical removal of the membrane. Most of these treatment options are replaced nowadays with intravitreal injections of anti VEGF agents. Several reports of case series or case reports showed good response to this treatment option. CASE 1 was treated with repeat intravitreal injection of Ranibizumab. The condition settled down with VA 6/9 and 6/18 in the right and left eyes respectively. There was no ocular or systemic side effect related to the injection. In case 2, no treatment was given as it showed spontaneous regression. It is known that Best’s Disease has Abnormal EOG and Normal ERG in previous studies; however, there are many reports proved that ERG is also affected in early stages of Best disease and this is correlated with case 1.

Conclusions CNVM is considered a significant cause of visual decline in young age group, Beside OCT, Electrophysiology testing is an important diagnostic tool in CNVM in Children, Anti VEGF is considered the treatment of choice nowadays.

References