



CASE REPORT OF RARE PRESENTATION OF BILATERAL DUANE'S RETRACTION SYNDROME

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ABSTRACT **Aims:** To present the case report of Bilateral Duane's retraction syndrome (DRS) with unusual presentation. **Materials and Method:** A 18 year old female presented with chief complain of deviation of both eye since birth. Other ocular and systemic history was not significant. Visual acuity in right eye was 3/60, while in left was 6/9. On distant examination patient had face turn to left side. On ocular examination patient had right eye esotropia. Right eye abduction and adduction both were restricted, in left eye only abduction was restricted. On adduction, patient had narrowing of palpebral aperture. The findings were suggestive of right eye Esotropia Duane's retraction syndrome type 3 with amblyopia and left eye Duane's retraction type 1. Patient was advised right eye Medial rectus recession under local anaesthesia.

Result: The eyes were aligned in primary position after surgery.

KEYWORDS : Duane's retraction syndrome with amblyopia, Esotropia with Duane's retraction syndrome.

INTRODUCTION:

Duane's retraction syndrome (DRS), also known as Stilling-Turk-Duane syndrome⁽¹⁾, is a congenital, non-progressive strabismus syndrome occurring in isolated or syndromic forms, characterized by some or all of the following⁽²⁾:

- Complete or less often partial absence of abduction
- Retraction of globe on adduction and narrowing of palpebral fissure on adduction⁽³⁾
- Partial deficiency of adduction
- Oblique movement with attempt at adduction
- Up shoot or down shoot of globe
- Deficiency of convergence

Case report:

A 18 year old female patient residing at Rajasthan came to our institute with chief complain of deviation of both eyes since birth, inability to move eye in lateral gaze. Deviation was non-progressive associated with reduced vision in right eye. Patient had no history of trauma, eye surgery, glasses, hypertension, diabetes or any systemic illness.

Unaided visual acuity in right eye(RE) was 3/60 and in left eye(LE) was 6/9. On distant examination, patient had face turn to left side. On Hirschberg corneal reflex, RE had 15 degree esotropia. Right eye was not taking fixation properly. Abduction of both eyes was completely restricted. Adduction was also partially restricted. On attempting adduction, narrowing of palpebral aperture and slight retraction of globe was seen in both eyes. Other ocular movements of both eyes were within normal limit. No oblique muscles overaction was found. Lid & lacrimal apparatus were normal. Anterior segment was also normal. Cover test was not applicable. Patient was advised refraction under Homatropine 2% which turned out +4.25 on vertical axis and +2.50 on horizontal axis in RE, while +2.25 in vertical axis and +1.50 on horizontal axis in LE. Fundus examination was also normal. On Fixation assesment, RE had eccentric fixation, LE had foveal steady fixation.

Best corrected visual acuity in RE was 3/60 and in LE 6/6 which is Suggestive of right eye amblyopia. She was advised Right eye medial rectus recession for cosmesis.



Picture 1: At the time of presentation

DISCUSSION:

Overall Prevalence of strabismus in DRS in strabismus has been

estimated to be 1-4%⁽⁵⁾. The majority of studies published on this condition point to a 60% female preponderance in patient with unilateral disease. left eye is affected in 2/3 of unilateral cases. Bilateral cases represent 15-20% of all cases with DRS⁽⁶⁾.

CONCLUSION:

In our case, 22 year female presented with bilateral DRS including RE DRS type 3, esotropia with amblyopia and LE DRS type1, which is a rare variety. She had face turn to left side with right eye eccentric fixation. Patient wanted surgery for cosmetic disfigurement due to abnormal head posture and deviation of eye, so she was advised RE squint surgery (Medial rectus recession under Local anesthesia). Prognosis for lateral rectus motility was explained. On post-operative day one, patient's eyes were in orthotropia.

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