

Dissociated Vertical Deviation

WHAT IS DISSOCIATED VERTICAL DEVIATION (DVD)?

DVD is a condition in which one eye drifts upward [See figure 1] when it is not being used. The eye may drift upward either frequently or infrequently. The amount of drifting may vary during the course of the day. DVD may be present in one or both eyes, and the amount of drift can be unequal between the eyes. Aside from the upward drift most frequently seen in DVD, outward drift or rotation of the eye can also be seen.



Fig. 1: Right eye drifts upward when fixating with the left eye. Photo courtesy Scott A. Larson, MD

WHEN AND WHY DOES DVD OCCUR?

DVD is not typically seen at birth and usually becomes obvious by 2-3 years of age. Occurrence is highest in those with early onset [strabismus](#) (misalignment of the eyes). It also can occur with a poorly seeing eye. DVD is highly correlated with poor fusion (decreased use of the eyes together). Children with good fusion have less chance of developing DVD. DVD may also develop after eye muscle surgery for strabismus.

DOES DVD AFFECT VISUAL ACUITY?

DVD can affect vision. Since the image from the upward deviated eye is suppressed or blocked, a type of decreased visual acuity, known as [amblyopia](#), may occur during childhood. Amblyopia is treated with glasses, eye patching, or eye drops. If amblyopia is not treated in early childhood, the decreased vision can be permanent.



WHAT TREATMENT OPTIONS ARE THERE FOR DVD?

Eye muscle surgery is usually indicated when the DVD is large and/or frequently present. The goal of treatment is to minimize the frequency of the upward drift. In some cases, even after treatment, the DVD may still be seen.

WHAT DOES SOMEONE WITH DVD SEE WHEN THEIR EYE DRIFTS UP?

Blurred or double vision is usually not noticed when the eye drifts upward. The visual system suppresses or blocks the vision in the eye that drifts upward.

DO EYE EXERCISES HELP DVD?

Eye exercises do not help DVD

Updated 12/2022