


Exophthalmus

Exophthalmos is a protrusion of the bulb forward (**protrusion**).

- **Axial protrusion** - conditioned by some kind of expansion behind the eye, most often between the oculomotor muscles (cavernous hemangioma, gliomas, meningiomas optics, [[endocrine orbitopathy]]).
- **Paraaxial protrusion** - the bulb is also displaced in the frontal and sagittal planes (orbital lesions outside the muscle cone, processes in the lacrimal gland, pseudotumors, lymphomas, cysts, or ingrowth from the surroundings, e.g. from the paranasal sinuses).
- **Bilateral protrusion** - mainly in endocrine orbitopathy.
- '*Fluctuations in the position of the bulb* - when bending forward or during exertion, the bulb protrudes, but we can push it back (venous varices in the orbit).
- **Pulsating exophthalmos** - synchronous with the pulse (arteriovenous malformation or carotid-cavernous fistula).

Exophthalmos-unilateral, axial.jpg	Exophthalmos-unilateral,paraaxial.		Exophthalmos - intermittent protrusion.jpg	Hertl's exophthalmometer.jpg
Exophthalmos - unilateral, axial	Exophthalmos - unilateral, paraaxial	Bilateral exophthalmos	intermittent protrusion	Hertl's exophthalmometer

Links

Related Articles

- Graves-Basedow disease
- Hyperthyroidism
- Endocrine Orbitopathy

References

- BENEŠ, George. *Ophthalmology Questions* [online]. [cit. 2010-12-11]. <<http://jirben2.chytrak.cz/>>.

Recommended reading

- ROZSIVAL, Paul, et al. *Ophthalmology*. 1. edition. Galen, Karolinum, 2006. ISBN 80-7262-404-0, 80-246-1213-5.
- COLOGNE, Jan. *Ophthalmology*. 2. edition. Karolinum, 2007. ISBN 978-80-246-1325-3.