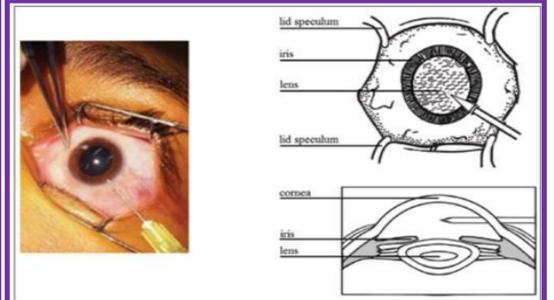


# Infectious uveitis: Is there a change/awareness in its spectrum?

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None of the authors have any financial/conflicting interests to disclose

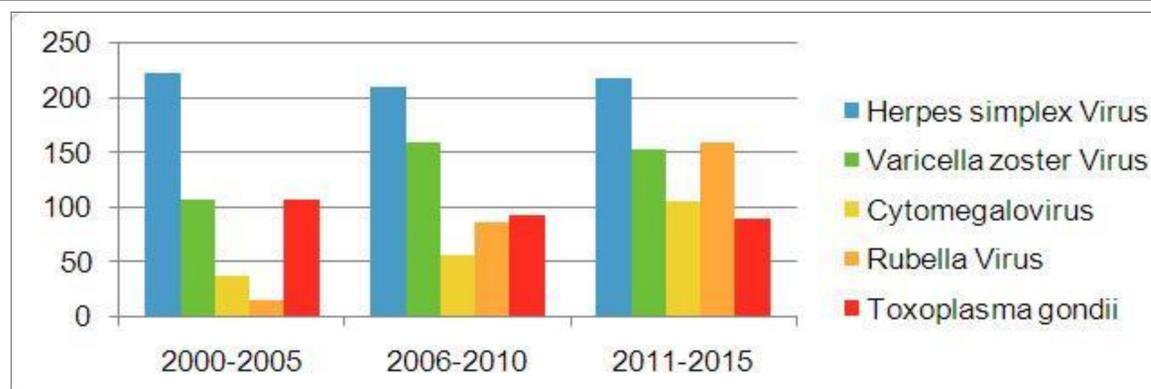
**Background:** The analysis of anterior chamber fluid has proved to be a valuable diagnostic tool to identify the infectious agents causing uveitis <sup>1</sup>. The aim of this study was to compare the pattern of infectious uveitis identified by the analysis of aqueous humor over the years 2000-2015.



**Methods:** We analyzed the aqueous humor samples of 2777 patient suspected to have an infectious cause of uveitis. The samples were taken between the year 2000 and 2015. Specific etiologies were determined for Herpes viruses (H. simplex, H. zoster and Cytomegalovirus), Rubella virus and Toxoplasma gondii. An infectious etiology for the uveitis was confirmed by a positive Goldmann/Witmer coefficient ( $\geq 3$ ). To compare a potential time related pattern we predetermined time frames for 2000-2005, 2006-2010 and 2011-2015 and applied statistical methods such as the analysis of variance (z-test).

**Results:** Between the years 2000 and 2015 2777 aqueous humor samples were analyzed for a suspected infectious cause. The absolute numbers of the taken samples varied for the given time period. But the proportion of the found agents did not differ significantly (table).

Infectious agent	2000-2005	2006-2010	2011-2015	p-value 2000-2005 vs 2006-2010	p-value 2006-2010 vs 2011-2015
Total number of aqueous humor samples	720	934	1123	1.2775	0.0075
Herpes simplex Virus	221 (45.8%)	209 (34.8%)	217 (30.1%)	0.3611	0.4468
Varicella zoster Virus	106 (21,9%)	158 (26.3%)	152 (21.1%)	0.0354	0.4371
Cytomegalovirus	36 (7.5%)	55 (9.2%)	105 (14.6%)	0.0459	0.0007
Rubella Virus	14 (2.9%)	86 (14.3%)	158 (21.9%)	0.0010	0.0023
Toxoplasma gondii	106 (21.9%)	92 (15.3%)	89 (12.3%)	0.4209	0.4414



**Conclusion:** Herpes virus related uveitis (simplex and zoster) remains a major cause of intraocular inflammation. We were not able to detect a significant shift in the occurrence of the different agents over the analyzed period of time. In contrast, the awareness and clinical importance for Cytomegalovirus and Rubella virus gained increasing attention which is most likely reflected in our findings. This data emphasizes the value of a defined diagnosis of intraocular inflammation for the subsequent therapy.