

<b>DEWS</b>	<b>DRY EYE: DIAGNOSTIC TEST TEMPLATE</b>	
<b>RAPPORTEUR</b>	Jun Shimazaki	Date: 31Oct 2004
<b>TEST</b>	<b>Brush cytology for eosinophils</b>	
<b>TO DIAGNOSE</b>	Ocular allergy and distinguish it from dry eye.	REFERENCES
<b>VERSION of TEST</b>	[1]	Tsubota et al. 1991
<b>DESCRIPTION</b>	To quantify conjunctival eosinophilia.	
<b>CONDUCT of TEST</b>	<ol style="list-style-type: none"> <li>1. The subject is seated and a topical anesthetic is administered.</li> <li>2. Conjunctival cells are collected with a cytology brush, which is brushed against the bulbar or tarsal conjunctiva several times.</li> <li>3. The brush is dipped in saline and shaken to transfer cells into the solution.</li> <li>4. The solution is centrifuged, and the collected cells are transferred onto a plastic plate.</li> <li>5. The cells are stained using Hansel's method, and the presence of eosinophils is examined under a microscope.</li> </ol>	
<b>Web Video</b>	Not available	
<b>Materials:</b>	Cytobrushes Optical microscope Plastic plates Staining solutions	
<b>Variations of technique</b>	Conjunctival cells can be collected using a cotton swab, or impression cytology.	Abelson et al.. 1983 ; Kari 1988; Sapci et al. 1999;
<b>Standardization</b>	Time of day [ ] Temperature [ ] Humidity [ ] Air speed [ ] Illumination [ ] Other:[ ]	
<b>Sensitivity</b>	[NA]	
<b>Specificity</b>	[NA]	

<b>Other Stats</b>	[NA]	
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### **References**

Abelson M B, Madiwale N et al. (1983). Conjunctival eosinophils in allergic ocular disease. *Arch Ophthalmol* 101(4): 555-6.

Kari O. (1988). Atopic conjunctivitis. A cytologic examination. *Acta Ophthalmol (Copenh)* 66(4): 381-6.

Sapci T, Gurdal C, et al. (1999). Diagnostic significance of impression cytology in allergic rhinoconjunctivitis. *Am J Rhinol* 13(1): 31-5.

Tsubota K, Takamura E, et al. (1991). Detection by brush cytology of mast cells and eosinophils in allergic and vernal conjunctivitis. *Cornea* 10(6): 525-31.