

DEWS	DRY EYE: DIAGNOSTIC TEST TEMPLATE	
RAPPORTEUR	Juan Murube	25th Dec 2004
TEST	SALIVARY SCINTIGRAPHY	
TO DIAGNOSE	Functional activity of salivary glands	
VERSION of TEST	[V 1]	
DESCRIPTION	Intravenous administration of Technetium 99 pertechnetate allows salivary gammagraphy	
CONDUCT of TEST	99m sodium pertechnetate is intravenously injected. The rate and density of label uptake and time of appearance of label in the mouth is observed during 60 minutes. Salivary scintigraphy, which examines the four major glands simultaneously, correlate with stimulated parotid flow rate measurement. The pattern of 99mTC-pertechnetate uptake is recorded on a gamma scintillation camera. Salivary gland scans are graded 1-4 based on the level of parotid gland uptake and secretion into the oral cavity.	Saito et al. 1997.
Web Video	Not available	
Materials:	Γ-scintillation camera	
Standardization	Time of day [x] Temperature [] Humidity [] Air speed [] Illumination [] Other:[]	
Variations of technique	The stimulated salivary clearance of Tc-99m pertechnetate (SSCP) studies the excretion fraction (SEF), and excreted activity (EA). The SSCP clearance values ranged from 5 to 40 ml/minute, with a clear-cut bimodal distribution centered around 15 to 20 ml/minute. Sjogren's syndrome had values less than 15 ml/minute. It reflects the parenchymatous salivary gland function and will provide a means to assess and predict salivary gland involvement. Dynamic salivary scintigraphy remains necessary in very early stages because of its high sensitivity rate and ability to locate the impaired gland, or in severe stages in which lemon juice could be deleterious.	Demangeat et al. 2000.
Diagnostic value	In SS patients uptake of label by glands is delayed and secretion of labeled saliva in mouth is delayed or absent.	
Repeatability	Intra-observer agreement. [-] Inter-observer agreement. [-]	
Sensitivity	(true positives) [-]	
Specificity	Salivary scintigraphy is a gauge of the salivary flow rates and can provide a good measurement of salivary gland dysfunction. However, the finding of low flow rates is not specific to SS	

References

Saito T, Fukuda H, Horikawa M, et al. Salivary gland scintigraphy with 99mTc-pertechnetate in Sjögren's syndrome: relationship to clinicopathologic features of salivary and lacrimal glands. *J Oral Pathol Med* 1997;26:45-50.

Demangeat R, Didon-Poncelet A, Cherfan J, et al. Stimulated salivary pertechnetate clearance revisited: correlation with dynamic scintigraphic indices in sicca syndrome. *Clin Nucl Med* 2000;25:888-94.

