

## ABSTRACT

### Measurement of human testicular consistency by Schiotz Tonometer.

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**OBJECTIVE:** To know that measurement of human testicular consistency by Schiotz Tonometer could evaluate the condition of testicular consistency objectively.

**METHODS:** In a cross sectional study of men who came to Andrology clinic Dr Soetomo Hospital, Surabaya in January to June 2007 with anything chief complain, we evaluate age, testis volume, testicular consistency with palpation and Schiotz tonometer, total sperm concentration and level of serum FSH. At first we did reliability analysis (between 2 people) and then diagnostic analysis to looking for cutoff value. For andrology status we compare result of tonometry with age, testis volume, sperm concentration and serum FSH level

**RESULTS:** There were 238 testis from 119 patients. Patients age had range 12 – 62 y.o., Testicular consistency, normal 202 testis, firm 13 testis, soft 23 testis. 48 testis (20,2%) with varicocele. Total sperm concentration from sperm analysis, we got from 100 patient, with range 0,24 – 700 million sperm, mean  $93,2 \pm 100,6$  million sperm. FSH level was examined from 36 patient, with range 2,1 – 40 IU/L, mean  $10,6 \pm 7,8$  IU/L

Result from reliability analysis between 2 peoples, show that there is very high similarity and very low differences in counting testicular consistency use Schiotz Tonometer.

Mean value testicular consistency with tonometer : Firm 20,87 mmHg, SD 4,91 ; range 17,30 – 34,50 mmHg; Normal 11,06; SD 1,98; range 7,10 - 17,30 mmHg; Soft 7,06 mmHg; SD 1,84 ; range 4,90 – 12,20 mmHg. Cutoff value for soft < 8 mmHg and firm > 15 mmHg.

There are significant correlation between testicular consistency and age (older – softer), varicocele (softer), testicular volume but in this case false corelation because the sample still mix with testiculare failure and varicocel, after we exclude them we didn't found that corelation (from spreading value grafix). There are no significant corelation between testicular consistency and total sperm concentration and FSH level, but spreading value of correlation between testicular consistency and sperm concentration and value of FSH level they have optimum value in 8 – 15 mmHg.

**CONCLUSIONS:** The measurement of human testicular consistency by Schiotz Tonometer could evaluate the condition of testicular consistency objectively.

*Key words :* testicular consistency, Schiotz Tonometer.