

Introduction

Testicular size is an important criteria for assessing testicular function; as 98% of testicular volume is composed of seminiferous tubules (*Takahara et al., 1987*), testicular size mainly reflects this tissue mass, and hence spermatogenesis (*Setchell and Brooks, 1998*).

There is strong correlation between the total testicular volume, which is the sum of the right & left sides, and the number of spermatozoa per ejaculate. Generally, reduction in the size of the testis is indicative of damage to the seminiferous epithelium of that testis, small testis of no more than 3ml volume are commonly found in men with Klinefilter syndrome. Patients with hypogonadotrophic hypogonadism also have small but rather soft testes of 5-12ml in volume (*Comhaire et al., 1987*).

A wide variety of measuring methods for testicular volume are recognized; although all these methods are not universally accepted. (*Diamond et al., 2000*).

The usage of the orchidometers depends upon the experience of the examiner. Ultrasound (US) is considered to be a safe and non invasive method for testicular volume measurement, US needs a high experience of the examiner in addition to the presence of different formulas for calculations (*Sakamoto et al., 2007*).

Sakamoto et al., 2007 stated that US is more accurate than Prader orchidometer & the best formula used for calculation by US is:

Length (L) x width (w) x height (H) x 0.71.

Aim of the work

The aim of this study is to compare the use of US to calculate the testicular volume with the testicular volume results from Prader orchidometer...