Study of Effects of Hydro-Alcoholic Extract of Asparagus Root (Asparagus officinalis) Ontestes Spermyogenesis Index of Laboratory Mouse

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Abstract: Spermatozoids production rate and its quality are more important factors in the diagnosis of infertility. Also, spermatozoids activity have a more important role in fertilization. Some medicinal plants as Asparagus (Asparagus officinalis) has many antioxidant component. Therefore, They can affect testes tissue to production more and high-quality spermatozoids. In this survey, Asparagus root extract is studied on spermatogenesis index in the laboratory mouse testes. Hydro-alcoholic extract of asparagus root is prepared and examined on four group of the mature male mouse. Blank group without extract, group 1, 100 ml/kg dose, group 2, 200 ml/kg dose and group 3, 300 ml/kg dose. Then, mice are euthanized, and testes are removed. Testes are weighted, and paraffinized blocks are prepared. TDI (Tubular Differentiation Index) and SPI (Spermiation Index) are studied on histological sections by light microscope. This study results were showed that TDI and SPI in treatments groups with 200 and 300 ml/kg dose had significant enhancement (P<0.05). Consequently, Extract of Asparagus root can enhance spermatozoid production and, therefore, cause improve fertility in male laboratory mice.

Keywords: histology, spermatozoid, ASP [aragus, testes]

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