Effct of high levels of female sex hormones on in vitro lymphocyte proliferation

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(1) Historical Review The Eustachian tube was first known by Alcaeon ofSparta as early as 500 B.C.• Followed by ” Aristole ” in 384 B.C.• Later between 1510 - 1518 ”Ingrassia” recorded hisobservations concerning the Eustachian tUbe.• Then ” Bartolommeo - Eustachio ” 1520 - 1574. Whodiscus it in details •• During the 17th centuzy ” Valsalva”enriched our knowledgeof the diseases of the ear •• n Guyot ” in 1724 was the first to describe the Eustachiancatheterization through the month.Then” Cleland” in 1740 began to introduce thecatheter through the nose •• n Cooper” in 1801 described deafness reSUlting froma closed Eustachian tube and deVised myringotomy totreat such deafness.• ” Johanne Muller ” in 1842 wrote his book ” Elementsof plysiology ”. ,He came to a conclusion that thetube is continuously open• II Toynbee ” in 1863 declared that the tube is nonnallyclosed and opens only during swallOWing •• ” Politzer ” in 1863 employed the po11tzerizationmethod for inflation of the Eustachian tUbe.• ” Rumbold ” in 1873 shared in describing the clinicalsymptoms of abnormally patent Eustachian tUbe •• ” Hartman ” in 1879 put the foundation of quantitativemeasurements of the resistance of the tube using apressure chamber •••(2) Anato~ of Eustachian tube :This chapter discusses in detail the anato~ ofEustachian tUbe. The tube 1s 31 - 38 mm in length, itconsists of two portions, the postero-lateral bony 1/3(Protympanum) and the anteromedial fibro _cartilage _nous 2/3 •The lumen of the tube is diVided into three une _qual portions:1. Posterior portion (tubal isthmus) •2. Extensive middle portion.3. An anterior or phaxyngeal portion.MuSCUlature of Eustachian tube:The muscles concerned with function of the Eustachiantube are in the order of their greatest influence.1. Tensor palati.2. Levator palati.3. Superior constrictor.4. Salpingo phar,yngeus.5. Tensor tympani.other muscles to be considered because of theiraction Over the soft Palate~1. PalatoPhar,yngeus.2. Palatoglossus.3. Musculus UVUlae.Mechanism of opening of Eustachian tUbe:There have been some controversy about which muscleopens the tube.(Holborow. 1962) proposed that the tUbe opens bythe action of Tensor palati.(Proctor. 1973) Proposed that both tensor palati.levator palat:l.openthe tUbal Luman ,(Dickson. 1976) postulated that the tube opens bythe synergistic action of both tensor palati. tensortympani.(3) PHYSIOLOGY OF THE EUSTACHIAN TUBE.- Eustach*an-tube is normally closed at rest aswell as during apeach ’and respiration.- The membrano_cartilaginous portion of the tubeis opened during the act of swallowing •- Protective Mechanismof the tUbe :1. The pharyngeal orifice opens in the nasopharynx.2. The Procedure of opening the tUbal

orificeis carried out by the samemuscle whichraise the soft palate and thus closing theoropharyngeal isthmus.). The cilia on the SUrface of lining mucosaof the tube is more in the direction ofthe nasopharynx.4. The tUbal orifice is rich in mucus secretingglands.5. :r.vmphoidtissue aggregation in the ViCin_ity of the tUbe.- Clearance function of Eustachian tUbe.- Mechanismof tUbal opening :1. In Phonation.2. In SWallowing.- Role of Eustachian tube in aviation and diVing:1. In AViation~2. In diving.- Effect of tUbal obstruction on hearing.