

Morphometric Study of Vocal Folds in Indian Cadavers

Rawal J.D^{1*}, Doshi B.D², Kariya V.B³, Jadav H.R⁴, Patel M.D⁵

ABSTRACT:-

Introduction: -The larynx is an air passage and a sphincteric device used in respiration and phonation. The larynx, from inside outwards has a framework of mucosa surrounded by fibro-elastic membrane which in turn is surrounded by cartilages and then a layer of muscles. Vocal folds are intrinsic ligament of larynx covered by mucosal folds. Larynx generates sound through rhythmic opening and closing of the vocal folds. The perceived pitch of human voice mainly depends upon fundamental frequency of sound generated by larynx. **Aim:** - The aim of present study is to measure various dimensions of vocal folds in Indian cadavers. **Material & Methods:** - 50 larynx were obtained from embalmed cadavers, of which 10 larynx were of females. Vocal cords were dissected from the larynx and morphometric analysis was done. **Results and Conclusions:** - The average total length of the vocal folds was found to be 16.11 mm. \pm 2.62 mm. in male and 14.10 mm. \pm 1.54 mm. in female cadavers. The average width of the vocal folds was found to be 4.38 mm. \pm 0.74 mm. in male and 3.60 mm. \pm 0.64 mm. in female cadavers. The average total length of the membranous part of the vocal folds was found to be 11.90 mm. \pm 1.86 mm. in male and 10.45 mm. \pm 1.81 mm. in female cadavers. The average ratio of the length of the membranous and the cartilaginous parts of the vocal folds was calculated to be 3.10 \pm 0.96 in male and 2.85 \pm 0.73 in female cadavers.

Key words: - Larynx, vocal folds

Authors

¹ Assistant Professor, ^{2,3}Associate Professor, ⁴Professor & Head, ⁵Tutor, Dept. of Anatomy, GMERS Medical college Sola, Ahmedabad Gujarat 380061

Author for Correspondence:

Dr. Jitendra D Rawal,
F-402, ICB Flora, S.G. Highway,
Near Gota Chokdi, Gota, Ahmedabad, Gujarat, India.
E-mail: jeeturw@gmail.com