

HANNAH LYNCH, Dept. of Natural Sciences & Mathematics, West Liberty University, West Liberty, WV, A. BENDER-HEINE, Dept. of Otolaryngology, West Virginia University School of Medicine, Morgantown, WV, JS HOLMES, A. RICKARDS, HW LAMBERT, Dept. of Neurobiology & Anatomy, West Virginia University School of Medicine, Morgantown, WV, and MJ ZDILLA, Dept. of Graduate Health Sciences, West Liberty University, West Liberty, WV and Dept. of Natural Sciences & Mathematics, West Liberty University, West Liberty, WV. The Depths of Commonly Grafted Costal Cartilages for Use in Facial Reconstructive Surgery

Reconstructive surgery commonly employs grafted costal cartilages, but the appropriate cartilage to select is often a question of the volume of material necessary to shape the graft. However, there is little information regarding the depth (superficial-to-deep) of commonly grafted costal cartilages. Therefore, this cadaveric study sought to determine the average depth of the 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> costal cartilages since these are the most commonly grafted cartilages. The cartilages were analyzed from medial, lateral, and intermediate locations, revealing that the thickest cartilage is found at the medial portion of the 6<sup>th</sup> cartilage while the thinnest cartilage is found at the medial aspect of the 8<sup>th</sup> cartilage. Average depth did not differ between cartilages near each respective rib, but the average thickness differed greatly near the sternum. Results support the assumption that any location along the 6<sup>th</sup> costal cartilage has, on average, a greater depth than any part of the 5<sup>th</sup>, 7<sup>th</sup>, or 8<sup>th</sup> cartilages.