Embryologically and anatomically, the larynx lends itself to certain principles of compartmentalization that have a significant influence on the pathogenesis and natural history of cancers within that organ. The embryologic development of the supraglottic larynx is different than that of the glottis and those tumors that develop in these respective sites behave differently.

There are fundamental anatomic factors within the larynx that are critical to the directional tendencies of tumor spread. The conus elasticus, the thyroglottic and quadrangular ligaments, and Broyle’s ligament are all fascial barriers that determine directional tendencies of cancer invasion within the larynx. The paraglottic and preepiglottic spaces are unique, and they too have a strong influence on the pathogenesis and natural history of these cancers. Whole organ sections of the larynx demonstrate very nicely these fascial layers and compartments.

Finally, the membranous vocal cords are unique because their mucosal edges are characterized by fluidity and motion characteristics directly related to the underlying anatomy. Alteration of the mucosal wave of these membranes is caused by cancer invasion and is indicative of the depth of the invasion. Modern stroboscopic technology helps the oncologist identify the depth specifically, and in so doing, helps in planning treatment strategies for early glottic cancer.

An understanding of these embryologic, anatomic, and physiologic factors allows appropriate strategies to be developed for specific cancers in a way that produces excellent treatment responses from both a curative standpoint as well as a physiologic one.

（全文は次号以降に掲載致します）