(a) Historical background

The history of the thymus gland dates back more than 2,000 years, from this earliest time, the role of the thymus was a mystery. The name thymus comes from the Latin derivative of the Greek word “thymos” which mean “warty excerescence” due to its resemblance to the flowers of the thyme plant.***(Haubrich, 1997)***

The earliest known reference to the thymus is attributed to the Rufus of Ephesus circa 100 AD who attributed the discovery of the thumus to the Egyptians. ***(May, 1968)***

Galen of pergamum (130 → 200 AD) stated that thymus was proportionally largest during infancy ***(Singer, 1956)***

Vesalius wrote in the 1600s that thymus was simply a protective thoracic cushion. ***(Crotti et al., 1922)***

In the 1700s, New theory was that the thymus somehow regulated fetal and neonatal pulmonary function. Others thought that the thymus simply filled the space that would later occupied by growing neonatal lungs. While in ***1777, William Hewson*** described the evolution of thymic size during fetal and infant life.

In ***1832, Sir Astley Cooper*** noted that there was wide variability in thymic size and morphology and reconfirmed Hewson’s observations with regard to fetal and infant growth.

In ***1864, Hassall and Vanarsdale*** used recent improvements in compound microscope lens quality to study thymus more thoroughly Hassall's famous corpuscles were thus named.

Radiology played a central role in diagnosis of many thymic disorders in infants, a radiograph could be used to distinguish an enlarged thymus and thus aid in differentiating it from laryngeal spasm or papilloma ***(Porter et al., 1924)***

In late 1940s, steroids were given by radiologists to shrink the thymus in children for improved visualization of the heart and great vessels. ***(Caffey and Libertic 1959)***

(b) Anatomy of the thymus gland

Morphology :

Thymus gland is a ductless gland located just beneath the chest bone it is flattened bilobed structure lying between sternum and the pericardium. ***(Bonyhadi et al., 1993)***

Each lobe of the thymus is formed of lobulated surface and a body with two ends. The superior horn which is cervical and the inferior horn that is thoracic and is wider and higher than the superior horn. ***(McMinn, 1994)***

Size and Weight :

Thymus gland weighs one third to one half ounce at birth, and reaches its peak weight of about 17 ounces at puberty. Thereafter, under the influence of many factors, including adrenal and sex hormones, the active thymus gland cells begin to die off, fig.(1) with much of the thymus gland tissue being gradually replaced by fat and connective tissue, much of the healthy thymus gland structure typically atrophies by the age 20, Fig.(2) and the decline accelerates through-out life there after.***(R. Waltz and C. Khan. 1997)***

Position and relation :

Thymus gland extends iferiorly to the fourth intercostal space and superiorly to the lower edge of the thyroid gland. It overlies the pericardium, the aortic arch and its branches, the left

brachiocephalic vein and the trachea. ***(Thibodeau and Patton. 1996)***

Anterior to the thymus are the sternum, adjacent portions of the upper four costal cortilages and the sternothyroid and sternohyoid muscles. The upper poles of each lobe are closely applied to the trachea, the body of the thymus extends anteriorly to the great vessels, and the lower poles extend a variable distance sometimes as inferior as the diaphragm. ***(Kornestein and de Blois, 1995)***