Case No. 2 (October 2003)

66-year-old male.

Medical History: Without important pathologic events.

Disease onset: Some months earlier.
Headache, dyspnea, cardiac arrhythmia and palpitation, evidence of superficial veins on thoracic wall, turgor of the jugular veins, flushed face.

Physical examination
Front region of the neck: few signs of thyroid goiter (Fig. 1); the Valsalva maneuver, cough and deglutition helped little to reveal the goiter; collateral venous circulation was visible on the front wall of the thorax (Fig. 2).
Rx and CT examination (Fig. 3-4): very large and deep intrathoracic goiter, with displacement and compression of the trachea and esophagus.

Fig. 1

Fig. 2

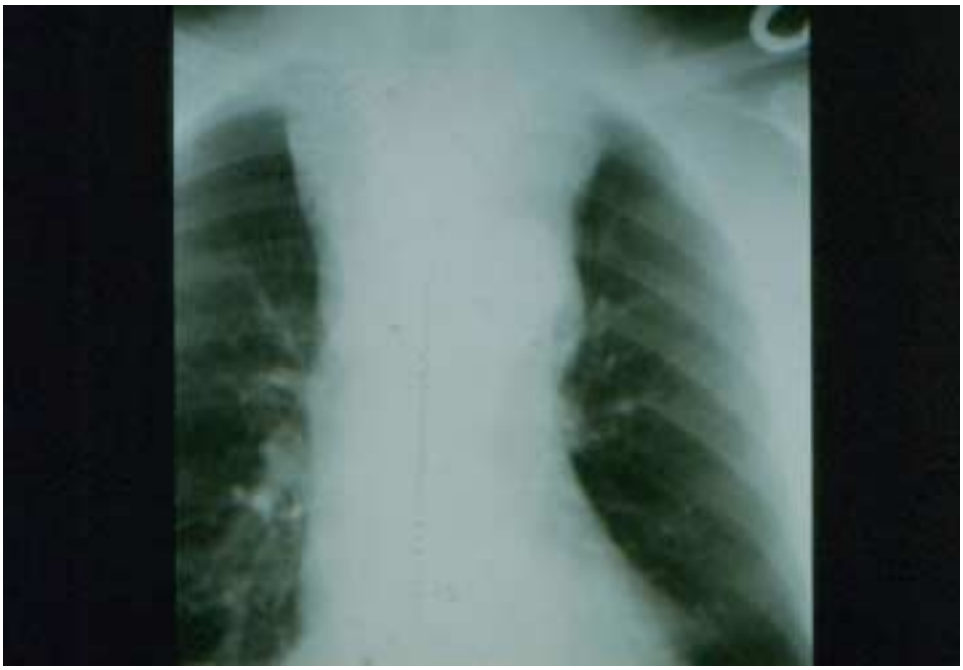

Fig. 3

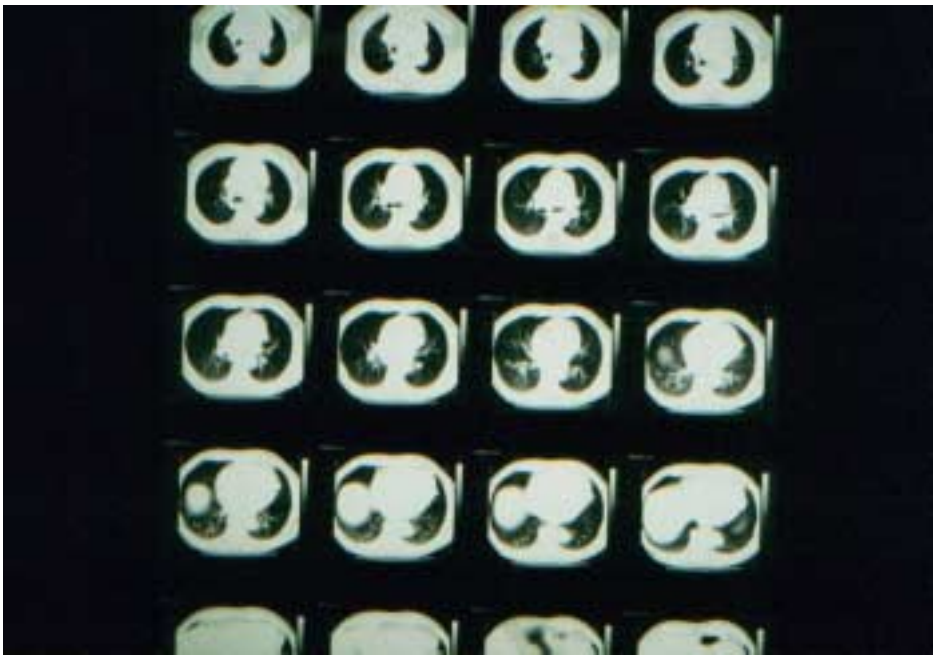

Fig. 4

Diagnosis: Cervico-Mediastinal Goiter with “Mediastinal Syndrome”

Surgery

General anesthesia with orotracheal intubation. Incision was made at the base of the neck and transverse section of the pre-thyroid muscles. Remarkable venous congestion (mediastinal syndrome) was present. Only the superior poles of the thyroidal lobes were on the neck, while most of the goiter lay in the thorax. On bilateral interruption of the superior thyroid arteries the goiter slid further into the thorax. As the goiter was too deeply located in the thorax, with retrovascular and retrotracheal branches, the sternotomic access was decided (Fig.5-6). Total thyroidectomy yielded a goiter (Fig. 7) with a weight of 700 gr.

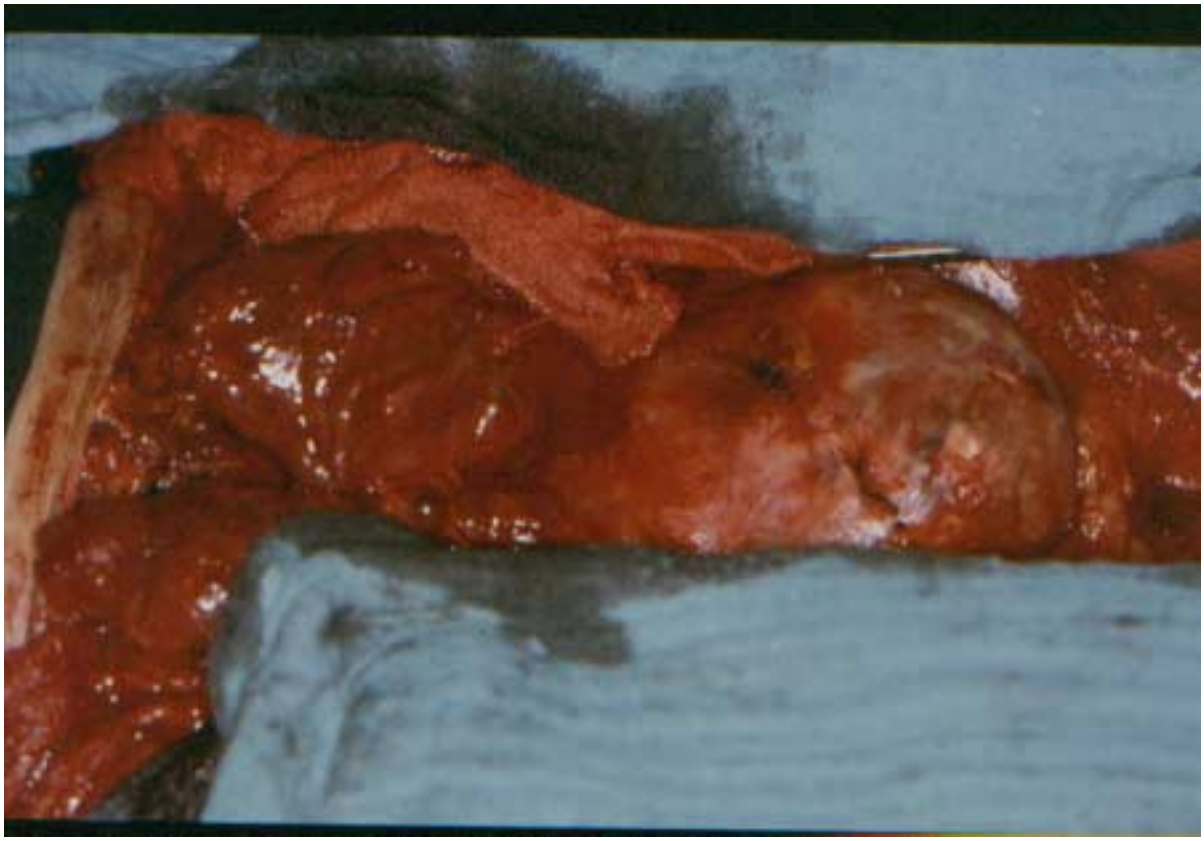

Fig. 5 –Cephalic end on the left. The mediastinal goiter is emerging from thorax along the sternotomy

Fig. 6 – Cephalic end on the left.

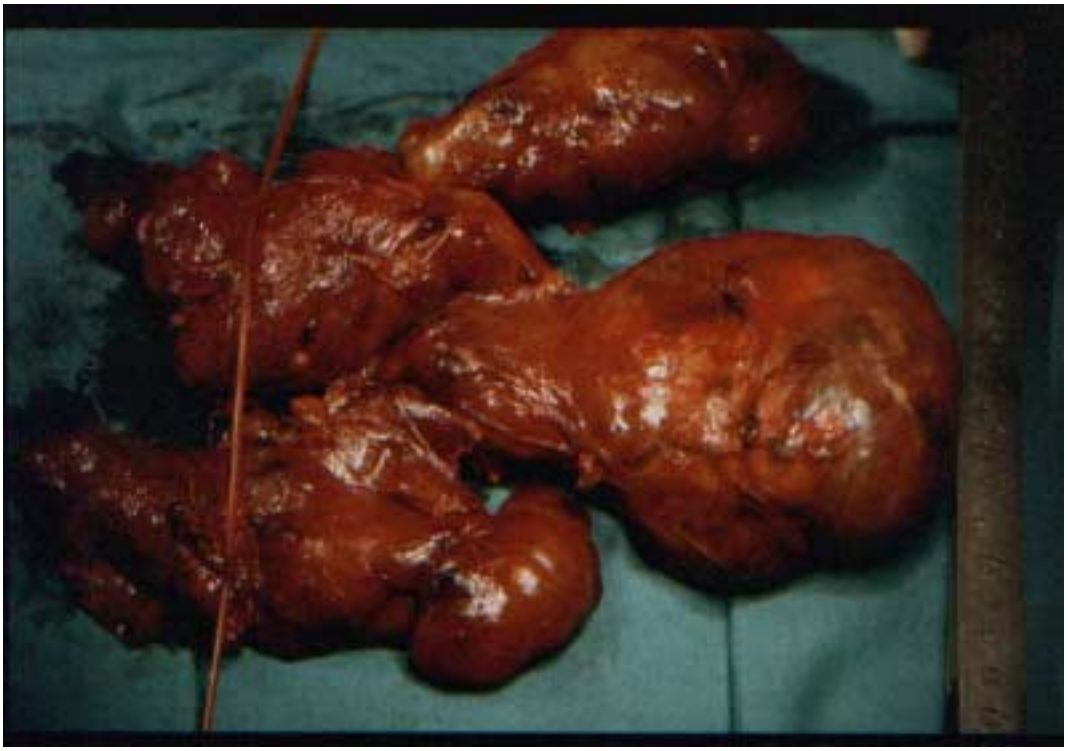

Fig. 7 – The liga-loop marks the jugular line.

Histopathological diagnosis: "multinodular colloid goiter"

Follow-up
Normal post-operative period. Very good outcome for general and endocrine conditions.

Remarks
We define *cervico-mediastinal* as a goiter three quarters of which lies below the jugular line of the sternum. Sternotomic access may be necessary only when the goiter is very large, deep and *"scarflike"* as in this case.

Some details of this case:

- clear evidence of mediastinal syndrome;
- important mediastinal translocation, with a minimal portion of orthotopic parenchyma;
- worsening of the translocation after interruption of superior thyroid arteries;
- strong adhesions of the goiter to mediastinal structures;
- the bulk of the goiter (700 gr);
- the deepness of the goiter in the mediastinum;
- the *"scarflike"* configuration;
- very good outcome in spite of the complexity of the operation.