Intraoperative Parathormone

The disease of hyperparathyroidism is an especially damaging situation for the human organism. The elevated (even by a little) Parathormone in the patient is, usually, the result of hyperactivity of one or more parathyroid glands. The therapeutic aim is the removal of the ailing glands.

However in parathyroidectomy operations, it is not enough to remove a non-descript "something". This "something" has to be proven in the end that IT was the one tha caused the elevation of the parathormone.

Parathyroidectomy is an utterly specialised surgical operation that often has many "traps" for the one performing the operation. The drop of the parathormone is the desired effect that will confirm the success of an operation.

According to the application of the Intraoperative Parathormone Monitoring method, the measurement of the hormone's levels at different stages of the operation, offers to the Surgeon important information for the completion of a successful operation.

Dr Karvounis, having long experience, is among the pioneers in Greece that introduced on a wide scale the use intraoperative parathormone monitoring in Endocrine Surgery. Having accumulated long experience in its use at the Cromwell and Hammersmith Hospitals in London, he presented his work in a ***pioneering for its age medical article***, in the year 2004, in the official scientific journal of the Hellenic Surgical Society. Nowadays he implements the method to **ALL** his parathyroidectomy operations.

It is necessary that we note that the **anatomical position** of the ailing parathyroid can vary to a great extent.. This means that it might not be located in the expected, usual position, but in an ectopic anatomic position (low in the thorax, within

the thyroid, to the side next to the carotid, etc.). Besides, in the surgical field, **the morphology and image that a parathyroid gland has**, resemble (and often "deceive") that of a normal part of fat of a normal lymph node.

The patient has to resolve his hyperparathyroidism through ONE and PROPER operation, without the need for re-surgery.

For the best possible achievement of this aim, **TWO IMPORTANT PREREQUISITES** are needed: I) the aid that the intraoperative parathormone monitoring method provides, AND II) the experienced specialist surgeon, who, on the hand, has to be able to realise the anatomical peculiarities-"traps" and to manage to locate the ailing gland(-s), and on the other hand, **to have the proper knowledge to interpret** the various (and at times ambiguous) responses with regard to the levels of the parathormone, that the method provides him with each time.