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*Practical aspects of preparation of the patient
for the thyroid gland surgery*

Widespread distribution of thyroid gland diseases, including nodular goitre, in Poland causes that many patients are referred to hospital for strumectomy. The indication for the surgery is the diagnosis following biopsy or when thyroid cancer is suspected, goitre with pressure symptoms (pressure on trachea, jugular veins), difficulty in swallowing, Horner syndrome, restriction in turning neck, recurrent hyperthyroidism, cosmetic reasons (1).

The decision about surgery must be taken following careful consideration, after other forms of treatment have proved ineffective and the patient has been informed about the aim, procedure and possible postoperative complications and agreed to undergo the surgery. The patient must be informed about quite common possibility of permanent hypothyrosis following strumectomy and the necessity of hormonal substitution continued for life. It is also important to choose a suitable surgical center with wide experience in this type of surgery. This is especially important nowadays when dissatisfied patients claim their rights and sue the doctors for improper treatment.

To diagnose nodular goitre and administer proper treatment it is necessary to carry out the following tests: TSH (sometimes even FT 4), USG of thyroid gland and aspiration biopsy with a thin needle (2, 3). Since USG testing has become very common, the diagnostic usefulness of scintigraphy of thyroid gland considerably decreased. In the course of detailed histopathological analysis it has been revealed that cancer of thyroid gland may occur in nodules of various scintigraphic ability to absorb radioactive isotope (cold, warm and hot nodules) (4). The doctor in charge of the case should be always on guard and take the results of the tests with some reserve.

A common error while doing the biopsy on nodular goitre is too small amount of aspirate of material collected for the test. Every focal lesion in goitre requires a puncture, and in the nodules of larger size the material for tests should be collected from several sites of tested lesion. The test should be performed under USG supervision. The only exception is the goitre with a large single node, situated on the surface of the neck, easily accessible for the puncture. In this particular case aspiration biopsy may be performed without USG supervision (5).

In recent years the indications for the surgery in Graves-Basedow disease have been considerably limited. The surgery in this disease is recommended in case of a large goitre with symptoms of pressure. Taking into account the autoimmune character of the disease there is a possibility of recurrence after the operation. Therefore, when referring for surgery, the endocrinologist in charge of the case should point out in his preoperative consultation the need for subtotal or total strumectomy, which prevents the recurrence of active form of the disease and the reappearance of the goitre to a considerable degree (6).

A very important element in the preparation of the patient for the strumectomy is obtaining euthyroidism and careful medical evaluation of the patient. The doctor referring the patient to the surgical ward takes professional and legal responsibility for the actual condition of the patient. Patients

referred from the medical ward to the surgical ward are usually well prepared and have careful medical history. However, the majority of patients from the out-patient department and surgeries have no consultation from the doctor in charge, and enclosed test results are often out of date and do not reflect the present condition of the patient. This often results in discharging the patient home to complete the tests and increases the cost of treatment due to unnecessary hospitalization. When the surgery is necessary, it is the responsibility of the doctor in charge of the patient to provide a letter of reference and enclose a comprehensive up-to-date medical opinion concerning not only this particular disease, but also the evaluation of his general health taking into consideration general anaesthesia.

In cases of patients referred for strumectomy the consultation should include: comprehensive diagnosis, indications for the extent of the surgery, recent hormonal evaluation of thyroid, evaluation of functional efficiency of circulatory and respiratory system, information about past or co-existing relevant diseases and drugs taken by the patient (especially anticoagulants, psychotropic, neurological, beta-blockers, insulin, steroids), present reading of blood pressure, ECG tracing and description, evaluation of basic laboratory tests, chest X-ray, recommendation on dosage of drugs administered to the patient. This information and co-operation with the surgical ward enables to shorten hospital stay and helps to prepare the patient for general anaesthesia.

Some patients require several day premedication with Lugol solution prior to the surgery for thyroid gland. This refers mainly to the cases of diffuse parenchymatous goitre in Graves-Basedow disease. The administration of Lugol solution results in smaller bleeding in the operative field and blocks the release of thyroid hormones (7). According to surgeons the administration of iodine to the nodular goitre does not affect the course of the surgery.

In cases suspected of malignant cancer an intra-operative histopathological test is performed. The obtained result enables possible extension of strumectomy. The test does not definitely diagnose follicular cystoid, as such diagnosis requires careful evaluation of tissue structure and finding the invasion of cancer cells to blood vessels (8).

Proper co-operation of endocrinologist, anaesthesiologist and surgeon enables the proper course of treatment in the patient undergoing strumectomy, and minimizes the risk of perioperative complications.

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SUMMARY

The aim of the study is to present practical suggestions of how to prepare a patient for thyroid gland surgery. Widespread distribution of thyroid diseases results in referring the patients for strumectomy. Proper preparation of the patient for the operation decreases the risk of perioperative complications to a minimum. Good co-operation in the team endocrinologist-anaesthesiologist-surgeon is very important for the effective treatment.

Praktyczne aspekty przygotowania pacjentów do operacji tarczycy

Celem pracy jest przedstawienie praktycznych wskazówek przygotowania pacjentów do operacji tarczycy. Znaczne rozpowszechnienie chorób tarczycy powoduje, że chorzy często są kierowani do zabiegu operacyjnego strumektomii. Właściwe przygotowanie pacjentów do operacji ogranicza do minimum ryzyko powikłań okołoperacyjnych. Dobre wyniki leczenia zależne są od należytej współpracy zespołu endokrynolog–anestezjolog–chirurg.