

SOLITARY THYROID NODULE – ALGORITHMS FOR DIAGNOSIS AND PRINCIPLES OF TREATMENT

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REZUMAT

Nodulul tiroidian solitar este o constatare clinică frecventă și constituie uneori un aspect derutant al patologiei tiroidiene. El se asociază cu un risc crescut de cancer tiroidian. Nu există un algoritm general acceptat pentru diagnostic, iar tratamentul rămâne controversat. Acest review își propune să descrie prevalența, istoricul, evaluarea clinică, metodele de diagnostic și metodele terapeutice existente în prezent. Sunt prezentate de asemenea rezultatele unui studiu realizat în Clinica de Endocrinologie Timișoara pe un grup de pacienți cu nodul tiroidian solitar, în ceea ce privește metodele de diagnostic, tratamentul și evoluția acestora.

Cuvinte cheie: nodul tiroidian solitar, gușă, cancer tiroidian, diagnostic, algoritm de tratament

ABSTRACT

The solitary thyroid nodule is a common clinical finding, being sometimes an elusive aspect of thyroid pathology and also a risk for thyroid carcinoma. There is no commonly recognised algorithm for diagnosis and even the treatment remains more or less controversial. The review aims to describe the prevalence, history, clinical evaluation, diagnostic techniques as well as the therapeutic means currently available. It also describes the results of a study performed in the Clinic of Endocrinology from Timisoara on patients with solitary thyroid nodules, concerning the diagnosis, therapeutic procedures and outcome.

Key Words: solitary thyroid nodule, goiter, thyroid carcinoma, diagnosis, management algorithm,

INTRODUCTION

A solitary thyroid nodule is a common clinical finding, being sometimes an elusive aspect of thyroid pathology. The disease represents also a risk for thyroid carcinoma.

There is no commonly recognised algorithm for diagnosis and even the treatment remains more or less controversial.

PREVALENCE OF THE DISEASE

Clinically, the disease is ascertained in 4-7% of adult subjects.^{1,2}

High resolution ultrasonography (US), systematically performed, shows that nodules in the thyroid are very prevalent (ranging from 17.7% - 67% in a given population), even when the gland is normal to palpation.^{3,4}

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Autopsy studies demonstrate that more than half of the population has nodular thyroid disease- NTD (single or multiple thyroid nodules).

The discrepancy between the true prevalence and that offered by clinical examination is evident. Thyroid nodules must approach 1 cm in diameter to be recognised on palpation.

The disease is more common in women (female to male ratio 4.5:1) and its incidence increases with advancing age.

NATURAL HISTORY

The natural history of the solitary thyroid nodule is poorly understood and is difficult to predict in a given case with respect to functional activity and growth tendency.

In the same time, it is not easy to discern between the patients who need monitorization without treatment and those who must be treated before the goiter growth.⁵

In a Japanese study, 140 patients with thyroid nodules not treated, were re-evaluated 15 years later.⁶ The nodular behaviour showed a large heterogeneity. (Table 1)