

## Screening for thyroid cancer

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### Screening for thyroid cancer

Thyroid cancer is one of the most common types of cancer, especially in southwest of Iran and Iraq (1). Many cases with thyroid cancer were presented at advanced stages after the US-led war against Iraq. Among the risk factors in developing thyroid cancers is exposure to low-dose radiation in the long term. As a result, they need complex surgeries and adjuvant therapies with major side effects, yet some are sadly incurable.

The indiscriminate use of prohibited weapons and ammunition by the alien invaders in this area can be one of the causes of the increased prevalence of thyroid cancers. Because the early detection of thyroid cancers can be effective in the treatment of the disease, small invasive cases (micro-invasive) can be simply treated by surgery; in addition, patients will not have any need for an adjuvant therapy or other costs and they will have a normal life span.

Unfortunately, the clinical diagnosis of the non-palpable (subclinical) disease is undetectable by the patient or a physical examination when the size of the tumors is less than one centimeter. Moreover, there is no specific blood test for these patients. It is, therefore, hidden from view until present as a cervical lymphadenopathy or an advanced cervical bump in the neck with invasion of surrounding tissues. Consequently, a screening test of the disease, especially for high-risk patients and in endemic areas may save people from a fatal disease, shorten the course of treatment and reduce the huge costs (2).

We offer annual thyroid ultrasonography for high risk people aged 18 and above. It is a very effective method for the early diagnosis of non-palpable thyroid nodules clinically (subclinically). If necessary, sampling by fine needle aspiration (FNA) under ultrasound guidance will diagnose the disease and the treatment (3).

This method is very simple and as ultrasound is available at all health centers. All radiologists can simply do that without any special training. Ultrasound of the neck can be done during other parts of the body or exclusively from the neck. Doing so will have a very minor cost. This method (cervical US) of screening for thyroid cancer can be considered justified.

### References

1. No author listed. Iranian Cancer Registry 2008. *Ministry of Health and Education*. Tehran, Iran.
2. Eden K, Mahon S, Helfand M. Screening high-risk populations for thyroid cancer. *Med Pediatr Oncol*. 2001; 36(5):583-91.
3. Ahn HS, Kim HJ, Welch HG. Korea's thyroid-cancer "epidemic"- screening and overdiagnosis. *N Engl J Med* 2014; 371 (19): 1765-1767.

