



# Thyroid Cancer Screening: Is It Beneficial?

Ahmed Ali M Alawad<sup>1</sup> and Awad Ali M Alawad<sup>2\*</sup>

<sup>1</sup>Department of Internal Medicine, University of Gezira, Sudan

<sup>2</sup>Department of Surgery, University of Medical Sciences and Technology, Sudan

## Editorial

Thyroid cancer is the leading cause of death among endocrine cancers second to carcinoma of the ovary. Now a day, the incidence of thyroid cancer is increasing more rapidly than any other malignancy. Nevertheless, it is proved that most of the newly diagnosed cases of thyroid carcinoma can be attributed to the high use of different thyroid imaging tools, mostly ultrasonography, because many cases of newly diagnosed thyroid carcinoma are small Papillary Thyroid Cancer (PTC) and the related death decrease in spite of the sudden increase in thyroid cancer. American Thyroid Association (ATA) guidelines in 2015 have adopted active surveillance of Papillary Thyroid Carcinoma (PTC) as a reasonable option, and the Korean Thyroid Association (KTA) issued the same recommendation [1]. Moreover, updated clinical protocols from American Association of Clinical Endocrinologists and the British Thyroid Association did not discuss active screening, meaning that there is still debate regarding active screening as a standard alternative option for surgery for papillary thyroid carcinoma [2].

Many studies investigated the advantages and harms of screening for thyroid cancer, concluding that the harms outweigh the advantages which are little for different causes. Firstly, thyroid cancer is fairly uncommon, at 3.4% of recently diagnosed cancer cases projected in the USA in 2017 and 0.3% of cancer deaths. Secondly, observational studies of patients receiving surgical treatment do not show survival benefits compared with those receiving surveillance. Finally, screening leads to increased incidence of thyroid cancer, but not decreased mortality. A cancer screening programme was started in Korea in 1999, which included thyroid cancer screening, caused diagnosis to increase by 15 times between 1993 and 2011, but mortality remained stable. This discrepancy occurs because tumors are often diagnosed that is so small or slow growing that they would have remained asymptomatic, making treatment unnecessary. Complications from treatment, however, are moderate, including hypocalcaemia and vocal cord paralysis caused by total thyroidectomy, as well as occurrence of a second cancer caused by radiotherapy.

On the other hand, the incidence of thyroid cancer has increased sharply in many developed countries over the past thirty years. Papillary thyroid carcinoma, which is the most common thyroid cancer, is rarely fatal. The 10 year survival rate is greater than 95%, and approximates 100% for the smallest tumors [3]. Over diagnosis is blamed for this increasing incidence; furthermore, the detection of very small tumors never expected to cause harm. Over diagnosis is a problem which may be exacerbated by screening because it exposes people to the potential side effects of treatment, but without an equal expectation of benefit, because the cancer is unlikely to advance. Although screening for thyroid cancer using neck palpation and ultrasound of the thyroid has been studied, many studies recommend against screening in the general asymptomatic adult population [4].

Further research is needed since no direct studies have compared screening with any screening or immediate surgery with surveillance, and the benefit of screening in high-risk patients has not been investigated.

## References

1. Borson-Chazot F, Bournaud C. [Thyroid cancer screening: is it useful?]. *Presse Med.* 2011;40(12):1182-8.
2. Stephenson C, Norlen O, Shun A, Karpelowsky J, Robinson B, Delbridge L. Papillary thyroid cancer in childhood: is parental screening helpful? *ANZ journal of surgery.* 2017;87(7-8):615-8.
3. Nys P, Cordray JP, Sarafian V, Lefort-Mossé È, Merceron RÉ. Screening for thyroid cancer according to French recommendations with thyroid ultrasound in newly diagnosed Graves' disease without palpable nodule is not useful. *Ann Endocrinol (Paris).* 2015;76(1):13-8.
4. Lee JH, Jeong SY, Kim YH. Clinical significance of incidental thyroid nodules identified on low-dose CT for lung cancer screening. *Multidiscip Respir Med.* 2013;8(1):56.

## OPEN ACCESS

### \*Correspondence:

Awad Ali M Alawad, Department of Surgery, Faculty of Medicine University of Medical Sciences and Technology, Wad Medani, Sudan,  
E-mail: awadali82@hotmail.com

Received Date: 15 Sep 2018

Accepted Date: 21 Sep 2018

Published Date: 24 Sep 2018

### Citation:

Alawad AAM, Alawad AAM. Thyroid Cancer Screening: Is It Beneficial?. *Am J Otolaryngol Head Neck Surg.* 2018; 1(5): 1021.

Copyright © 2018 Awad Ali M

Alawad. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.