

Thyroglossal Cyst: A Case and a Description of the Early Documentation in the Medical Literature

Aamir Jalal Al-Mosawi *

1-Advisor in Pediatrics and Pediatric Psychiatry Children Teaching Hospital of Baghdad Medical City

2-Head, Iraq Headquarter of Copernicus Scientists International Panel, Baghdad, Iraq

1. Abstract

Background: Thyroglossal cyst is a birth defect resulting from persistence of the thyroglossal duct. The aim of this paper is to present a case of pediatric thyroglossal cyst and to briefly describe the early documentation of the condition in the medical literature.

Patients and methods: A case of childhood thyroglossal cyst is presented and a deep review of the literature is made with the aim of describing the early documentation of the condition in the medical literature

Results: The occurrence of median cervical cysts was reported during the 1800s. However, Strübing (1892) was most probably the first to suggest that most of these reported cases had cysts of thyroglossal origin and not of branchial origin. In 1894, Herbert E Durham supported the suggestion of Strübing and described three cases of thyroglossal cyst. Walter Ellis Sistrunk developed the improved surgical method for the treatment of thyroglossal cyst during the 1920s that is still practiced until now.

Conclusion: Herbert E Durham and Walter Ellis Sistrunk are the pioneers who are accredited for most of our current understanding of the clinical therapeutic aspects of thyroglossal cyst.

2. Keywords: Thyroglossal cyst; Historic SunKrist Endocrinol and Metab Res J

background; Pioneers of medicine.

3. Introduction

Thyroglossal cyst is a birth defect resulting from persistence of the thyroglossal duct which develop during the embryonic period to facilitate movement of the thyroid gland from the base of the tongue where it initially develops to its final position in the neck. The aim of this paper is to present a case of pediatric thyroglossal cyst and to briefly describe the early documentation of the condition in the medical literature [1-7].

4. Patients and Methods

A case of childhood thyroglossal cyst is presented and a deep review of the literature is made with the aim of describing the early documentation of the condition in the medical literature.

5. Results

A three-year, otherwise healthy girl was brought by her mother because of the presence of a small painless midline cystic neck swelling (Figure 1) that was moving during swallowing. The patient didn't have fever or any sign of neither infection nor difficulty in swallowing.

***Corresponding author:** Al-Mosawi AJ, Department of Pediatrics and Pediatric Psychiatry, Children Teaching Hospital of Baghdad Medical City, Iraq, E-mail: almosawiAJ@yahoo.com

Received Date: August 30, 2020; **Accepted Date:** September 02, 2020; **Published Date:** September 10, 2020

The clinical diagnosis was confirmed by ultrasonography.



Figure 1: A three-year girl with thyroglossal cyst.

The occurrence of median cervical cysts was reported during the 1800s (Strübing, 1892; Schlange, 1893; Herbert E Durham, 1894) [1-3]. However, Strübing (1892) was most probably the first to suggest that most of these reported cases had cysts of thyroglossal origin and not of branchial origin.

In 1894, Herbert E Durham (Figure 2) described three cases of thyroglossal cysts and supported the suggestion of Strübing as he thought that many of the cases described by von Kostanecki and Mielecki as median branchial cysts were in fact, thyroglossal cysts.



Figure 2: Herbert E Durham (March, 30, 1866 - 25 October, 25, 1945), a British physician.

Walter Ellis Sistrunk (Figure 3) was the first to provide a detailed account of a surgical technique for

thyroglossal cysts during the 1920s [4,5].

Schlange, in 1893 and Durham, in 1894 reported their treatment of the condition by excision of the central part of the hyoid bone and dissecting the tract thyroglossal up to the base of the tongue [2,3].



Figure 3: Walter Ellis Sistrunk (1880-1933).

Walter Sistrunk reported the use of a method aiming at complete excision of the tract to prevent recurrence [4,5].

Sistrunk's method involved trans-cervical cystectomy, excision of the supra-hyoid thyroglossal duct, resection of the central part of the hyoid bone and resection of the foramen cecum.

6. Discussion

The diagnosis of thyroglossal cyst can be made clinically in most cases and can be confirmed with an ultrasound study.

The use of ultrasound in confirming the diagnosis of thyroglossal cyst has been suggested during the 1970s and 1980s [8,9].

7. Conclusion

Herbert E Durham and Walter Ellis Sistrunk are the pioneers who are accredited for most of our current understanding of the clinical therapeutic aspects of thyroglossal cyst.

8. References

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Citation: Aamir Jalal Al-Mosawi. Thyroglossal Cyst: A Case and a Description of the Early Documentation in the Medical Literature. SunKrist Endocrinol and Metab Res J. 2020; 1: 1001.

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