

Ovarian Teratomas: Struma Ovarii in Nigeria

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Abstract

Objective: To perform clinic-pathological analysis of struma ovarii in a Nigerian community.

Method: An analytical survey was undertaken of cases of struma ovarii submitted to a Regional Reference Pathology Laboratory between 1970 and 2000 by local gynecologists with orderly observations required to be detailed in the Request Forms.

Results: The survey showed that 11 patients were diagnosed with struma ovarii. All cases had unilateral lesions that presented with abdominal mass and/or pain. Oophorectomy was carried out uneventfully. Microscopy confirmed the diagnosis of struma ovarii with predominating thyroid tissue. None was malignant.

Conclusion: Our survey indicated that, just as a UK group recommended that the establishment of a histopathology data pool could be used to perform clinic-pathological analysis, our own pool patterns confirmed that struma ovarii presents classically in this developing community.

Keywords: Ovary; Struma ovarii; Neoplasm; Epidemiology; Nigeria

Introduction

Struma of the ovary is a teratoma of this organ in which thyroid tissue is present exclusively or predominantly. We are aware of reports from diverse countries such as Yugoslavia [1], Korea [2,3], Turkey [4] and Mexico [5]. A malignant case in USA is on record [6]. Therefore, it seems to us that our experience in a developing community is worthy of publication. Moreover, a UK group maintained that establishment of a histopathology data pool can help in scientific analysis [7].

Material and Methods

In our retrospective study from 1970 to 2000, 11 patients, who were operated on, were diagnosed as cases of struma ovarii in a Reference Pathology Laboratory data pool that is situated at Enugu and was serving members of the Igbo Ethnic Group [8]. The histopathological analysis was carried out on routinely prepared tissue samples. An illustrative figure is included as well as tabulated data (Figure 1 and Table 1).

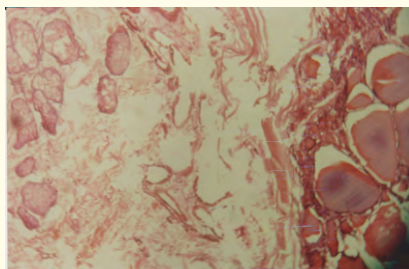


Figure 1: Shows microscopic appearances of small part of the thyroid as well as stroma and sebaceous glands.

Serial No	Age (yr)	Side	Parity	Symptom (s)	Size (cm)
1.	28		3	Mass, pain	10
2.	45		5	Pain	4
3.	35	L	6	Mass, pain	6
4.	55	R	12	Pain	14
5.	41	R	-	Mass, pain	8
6.	75	R	6	Mass	20
7.	35	L	10	Pain	10
8.	19	L	0	Pain	4
9.	30	R	0	Mass	4
10.	23	R	0	Mass, pain	11
11.	60	L	5	Mass, pain	12

Table 1: Clinic-pathological parameters of struma ovarii in Nigeria.

Discussion

All our cases were unilateral and benign just as had been previously reported [1]. Incidentally, Cases 2 and 5 exhibited the thyroid look itself on naked eye examination when they were being sectioned. The rest manifested varying degrees of this tissue at microscopy.

Preoperative diagnostic procedure, such as computed tomography [2], was not used by those who submitted their operation specimens to us.

Of the 2 cases recorded in Yugoslavia [1], one was menopausal. In our series, 3 (27%) were menopausal. If the menopause is taken arbitrarily as over 50 years, it was 32% in one Korean report [3].

The menopausal patient, who was reported from Mexico [5], developed hypothyroidism following struma ovarii tumor resection. In a Turkish teenager [4], the association was with Hashimoto’s thyroiditis. We have no record of such sequels.

From their literature search, Navarro’s colleagues6 found the peak age incidence to be the fifth decade of life. Table 2 shows that in our series there was predominance in the 21 - 40 age range.

Age (yrs)	Numbers
11- 20	1
21 - 30	3
31 - 40	3
41 - 50	1
51 - 60	2
61 +	1
Total	11

Table 2: Age incidence pattern.

The mean size of tumors was 11.4 cm (range 4.7 cm – 21.0 cm) in a Korean series [2]. Ours ranged from 4 cm – 20 cm (mean 9 cm).

Literature sources often omit parity. In oneJournal,1 the parity was 2 and 3 respectively in their two patients. Here, apart from serial No 5, whose religion forbids marriage among a group, the other 10 patients showed the parity range of 0 to 12 (mean 5).

Conclusion

Benign and unilateral struma ovarii was diagnosed in 11 patients whose operation specimens were submitted to a Reference Pathology Laboratory functioning in Enugu in a developing community in Nigeria. Some clinic-pathological parameters were examined and compared with published patterns. Thus, it was meaningful that one side was affected. Other positive data concerned menopausal status, peak age incidence, mean size of tumors, and parity.

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