CERVICAL LYMPHADENOPATHY OF TOGOLESE CHILDREN IN A TROPICAL CONTEXT: CLINICOPATHOLOGICAL STUDY

Simgban P.*1, Doukouré B.2, Djiwa T.1, Amana B3, Bissa H.4 and Darré T.1

¹Department of Pathology, University Teaching Hospital of Lomé, Togo; ²Department of Pathology, University Teaching Hospital of Cocody, Abidjan, Ivory Coast; ³Department of Head and Neck Surgical, University Teaching Hospital of Lomé, Togo; ⁴Department of Stomatology, University Teaching Hospital of Lomé, Togo

*Email: panakinaopsr@gmail.com

Introduction

Cervical lymphadenopathy in children is a frequent reason for consultation. It is a diagnostic challenge owing to its extensive differential diagnosis and requires rigorous diagnostic investigation to resolve [1,2]. In many, a complete clinical examination may establish the origin of the lymphadenopathy before the histological analysis, but requires knowledge of possible aetiology [3]. Differences in regional causes for lymphadenopathy have been described [3]. In Africa, particularly in Togo, limited knowledge of cervical adenopathy in children is available. The aim of our study was to document the epidemiology and aetiology in Togolese children aged < 15 years.

Methods

This was a retrospective file review. Patients aged <15 years were diagnosed from 2003 to 2017 at the Department of Anatomical Pathology of the Sylvanus Olympio Teaching Hospital of Lomé. During this period, lymph node specimens were registered, prepared in paraffin-embedded sections (at 56–60 C) and stained with haematoxylin and eosin. Our laboratory does not have the facilities to perform immunohistochemistry techniques. Confirmation of HIV was done by indirect enzyme-linked immunosorbent assay tests. All specimens were accompanied by the relevant patient clinical data. The study parameters included laterality of the nodes, sex, age and possible aetiology. Lymphomas were classified according to World Health Organization classification.

Results

Our study included 221 cases of cervical lymphadenopathy in children (118 [53.4%] boys; mean age at diagnosis = 9.8 ± 0.3 years; age range = 2 months–14 years). A total of 112 (50.7%) cases were unilateral, 95 (43.0%) were bilateral and 14 (6.3%) were not specified. HIV was confirmed in 69 (31.2%) children. Amongst HIV-positive cases, the aetiology was TB, sarcoidosis (n = 2) and lupus (n = 1). Six cases of Burkitt's lymphoma were the only malignancies associated with HIV in the cohort.

Table I: Distribution of infectious aetiology		Table II: Distribution of non-Hodgkin lymphoma	
Type of aetiology	Cases	Histological type	Cases
Tuberculosis	84 (65.6)	Burkitt's lymphoma	44 (75.9)
Histoplasmosis	9 (7.0)	Diffuse large B-cell lymphoma	6 (10.4)
Toxoplasmosis	2 (1.6)	MALT lymphoma	3 (5.2)
•	, ,	Mature T and NK neoplasms	2 (3.4)
Leishmaniasis	1 (0.8)	High-grade B-cell lymphoma, NOS	2 (3.4)
Non-specific adenites	32 (25.0)	B-cell lymphoma, unclassifiable	1 (1.7)
Total	128 (100)	Total	58 (100)
Values are given as n (%).		Values are given as n (%). MALT, mucosa-associated lymphoid tissue; NOS, not otherwise specified.	

Conclusion

Cervical lymphadenopathy in children remains a common problem.

- 1. Umapathy N, De R and Donaldson I. Cervical lymphadenopathy in children. Hosp Med 2003; 64: 104–107.
- 2. Gosche JR and Vick L. Acute, subacute, and chronic cervical lymphadenitis in children. Semin Pediatr Surg 2006; 15: 99–106.
- 3. Chiappini E, Camaioni A, Benazzo M, et al. Esposito Development of an algorithm for the management of cervical lymphadenopathy in children: consensus of the Italian Society of Preventive and Social Pediatrics, jointly with the Italian Society of Pediatric Infectious Diseases and the Italian Society of Pediatric Otorhinolaryngology. Expert Rev Anti Infect Ther 2015; 13: 1557–1567.