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Institute of Post-Graduate
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COMPARATIVE CLINICO-PATHOLOGICAL STUDIES IN CHILDREN WITH CERVICAL LYMPHADENOPATHY FROM DIFFERENT SOCIO-ECONOMIC LEVELS

A Thesis

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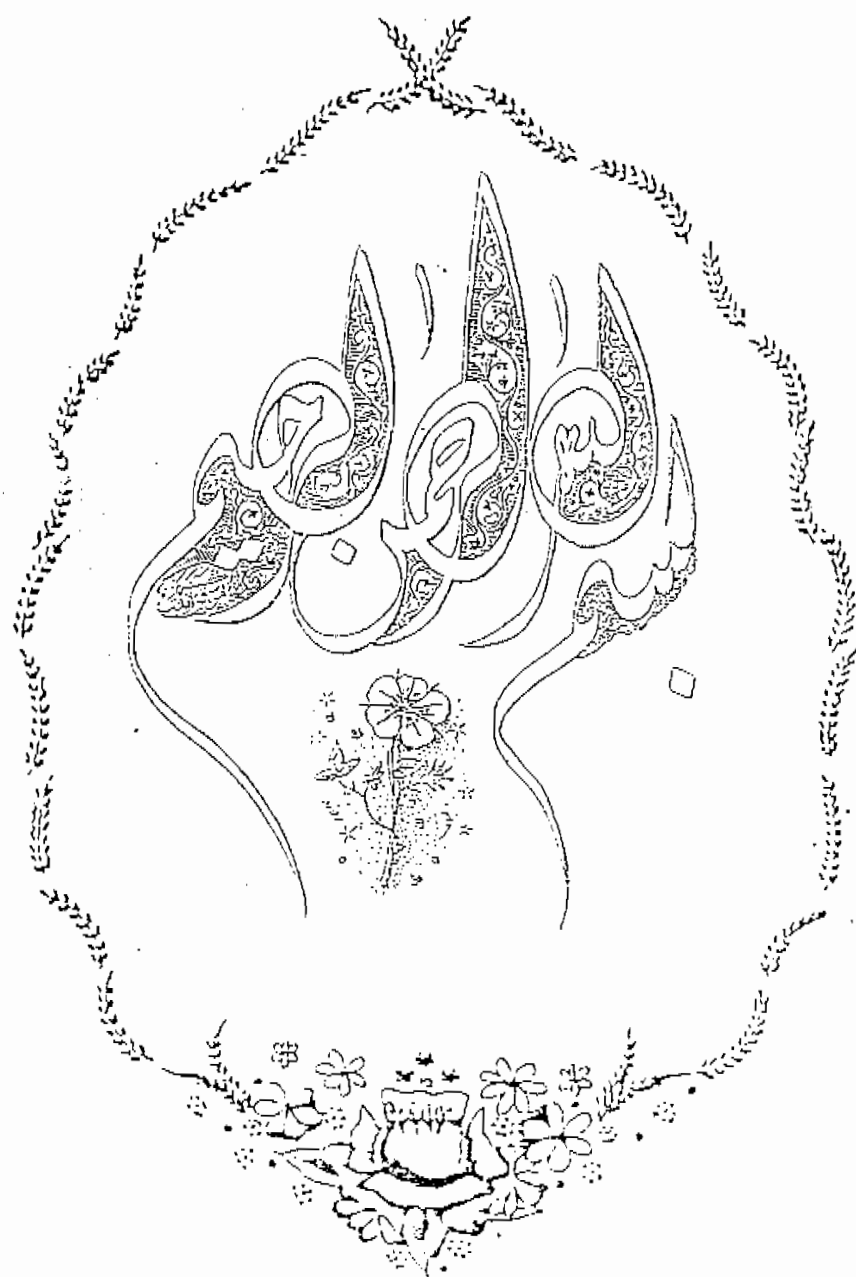
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Abstract

200 patients with cervical lymphadenopathy were compared:

Group (A) : 100 Egyptian children coming to a public hospital in Cairo (Pediatric Hospital of Ain Shams University) .

Group (B) : 100 Saudi children coming to private hospital in Jeddah (Saudi Germinal Hospital SGH) .

The age of all children ranged from 3-15 years, 97 were males and 103 were females. All children were subjected to further investigations ,and from diagnosis results showed that : The commonest cause for cervical lymphadenopathy was found to be tuberculous cervical lymphadenitis (TCL) comprising (51%) ,followed by acute non-specific adenitis (27%) . Patients that had leukemia were (11 %).

On the other hand the percentage of Hodgkin's lymphoma was (3%) and the non-Hodgkin's lymphoma was (0.5%).

Although both groups showed a high incidence of (TCL) , yet patients in group (B) with higher social class showed lower percent than children in group (A). And the most affected nodes were the posterior groups.

Cervical adenitis showed no big difference related neither to sex nor age in both groups. As tuberculous cervical adenitis is re-increasing again these days , more specific diagnostic tests are recommended for early diagnosis . Early control and treatment are recommended before any complication . prevention of TB. by using BCG. vaccine and chemotherapy is mandatory especially to children in contact with adult case.

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Title: Comparative ~~clínico~~ *clinical* - ~~pathological~~ *pathological* studies in children with cervical lymphadenopathy from different socio-economic levels .

Key Words:

T.B.: Tuberculosis, C.L.N.: Cervical lymph nodes.

F.N.A.C.: Fine needle aspiration cytology.

P.C.R. Polymerase Chain Reaction

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INTRODUCTION

INTRODUCTION

Almost every person has had cervical adenopathy to a greater or lesser degree at sometimes during childhood. It is a common clinical finding by the pediatrician (*Stanievich, 1990*). Fifty per cent of all neck masses were due to cervical lymphadenopathy which reflects significant disease more often in adult than in children (*Thabit, 1984*). The non-malignant forms of lymphadenopathy are much more common in childhood (*Murphy, 1987*). A recent survey found that less than two percent of all lesions of the head and neck in children that had been biopsied were malignant. However, the lump in the neck still demands a precise diagnosis (*Stanievich, ET al.1987*).

Enlargement of lymph nodes occurs in response to a wide variety of infection, inflammatory, and neoplastic processes. Enlargement of a single node or group of nodes is most frequently caused by an infection in the area drains. Generalized lymphadenopathy occurs much in infection (*Beherman, 1992*). Studies have been carried out to study the causes of cervical adenopathies in childhood in different countries.

Both pathologists and clinicians often lack confidence in the resulting diagnosis, so, repeated biopsy may follow (*Collin, 1985*).

Cervical adenopathy can be defined as "*swelling and morbid change in the lymph nodes of the neck*" (*Tabers, 1985*).

Node may be the only site of disease; however, most nodal diseases are related to abnormalities in the organ associated with the abnormal nodes. There is an order and predictability to nodal diseases; in general, nodal diseases follow the same rules in terms of tissues. The basic question the pathologists first attempt to answer when studying nodes biopsies, is that whether the process is reactive or neoplastic and what is the general characterization of the neoplastic process (*Robert, et al. 1989*).

Whether a palpable node is a clinically significant depends on its location, the patient's age and occupation.

Lymphadenopathy is the common clinical problem and poses difficulty in diagnosis because of the numerous causes encountered (*Anthony & Reef 1988*).

Tuberculous cervical lymphadenopathy used to be the common clinical entity during the 1950s. This fact was still true in the 1980s in the Third World countries (*Cheung et al., 1988*).

Malignant lymphomas are a diverse group of disorders affecting the lymphoid system. The non malignant nodes are more common in childhood however, there is an overlap of many of their clinical and pathological features with the malignant disorders .In the early stages of malignant lymphomas, few, if any, clinical features are present that permit differentiation from non-neoplastic lymph node enlargement. Partial or complete lymph node obliteration of normal lymph node architecture is common to all types of malignant lymphoma but is not pathognomonic, as chronic lymphadenitis and infectious mononucleosis may obscure or obliterate lymph node architecture (*Murphy 1987*).