LIMB PAIN IN INFANCY AND CHILDHOOD

THESIS

Submitted in Partial Fulfilment for
The Master Degree in Physical Medicine

BY

HALA ABD-EL HADY SALEH
(M.B.' B.Ch.)

SUPERVISORS

Ass. Prof. Dr. NADIA ABD EL-SALAM EL-KADERY
Assistant Professor of Physical Medicine
Ain Shams University

Dr. MOHAMED GAMAL EL-DIN ZAKI
Lecturer of Physical Medicine
Ain Shams University

Ain Shams University
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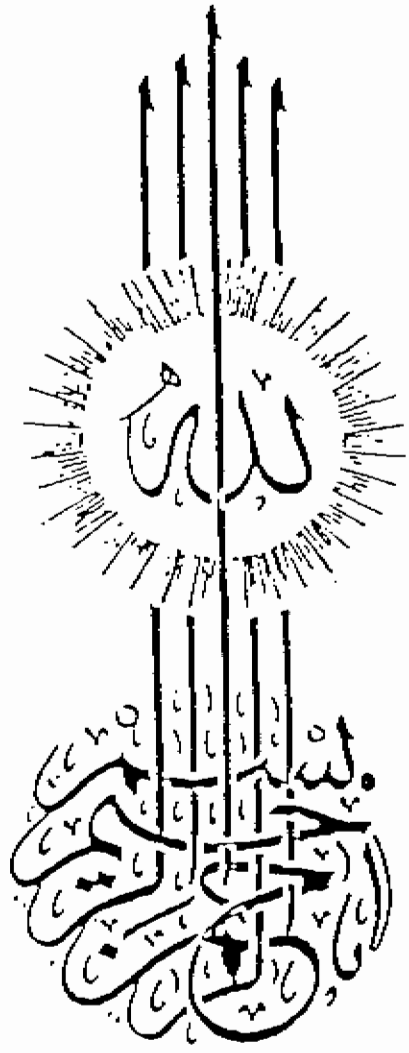

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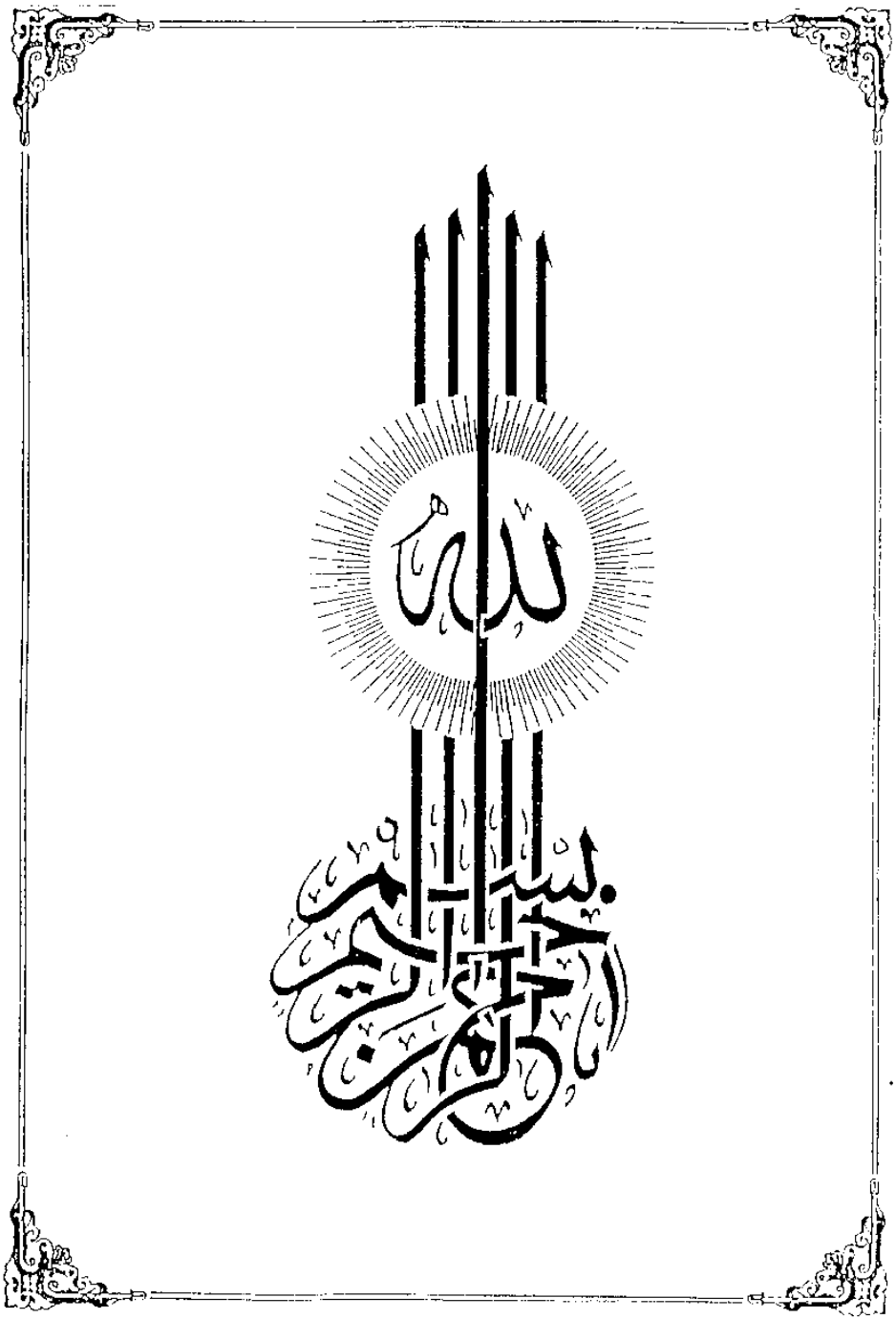

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INTRODUCTION

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INTRODUCITON

Pain in the limbs is a common porblem in infancy and childhood. It is the presenting complaint in seven percent of pediatrician visits. (Hyattsville, 1981). At times, the search for the cause of the pain can be frustrating, especially when one is confronted by a healthy appearing child who complains of pain but has no positive findings on physical or laboratory examination.

The differential diagnosis of limb pain in infancy and childhood includes a diverse collection of illneses. A cause for the pain physical or psychological, can usually be elucidated when the problem is systematically approached.

when a child presents with limb pain, it is advantageous that a diagnosis be made quickly. If the cause is organic treatment can begin immediately. If a conversion reaction is responsible, attention can be removed from the somatic complaint and refocused on the psychological process responsible for the child's pain.

When the child exhibits the classic symtoms of growing pain, the family can be reassured by the explanation of the benign nature and good prognosis of this condition. (S.L. Boyer, and Hollister, 1984).

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There are clues in the history and initial observations of the child that suggest to the physician the category of illness into which the patient best fit. Children with organic pathology should be able to localize their pain to a joint or to a well-defined area between two joints. Discomfert will usually be severe enough to interfere with play and other noraml activities. It will occur day and nignt as well as on weekends.

Pain caused by trauma or tumours is frequently unilateral, collagen vascular disease commonly present with symmetric findings. Constiutional signs and symptoms may be evident in the history or physical examination. (S.L. Boyer, and Hollister, 1984).

Callanan reviewed the charts of 55 children who are seen in an Emergency Room with a chief complaint of limp or refusal to walk. In 52 of 55, a definite organic cause for the symptom was discovered. (Callanan, 1982).

When the pain is non-organic (Functional), the patient's description of the pain may not fit any logical anatomic or physiologic process. The history may be related in either an inappropriately dramatic or overly indifferent manner. The pain will fequently occur on school days or during unpleasent situations. Weekends are often pain-free, and there is very little interruption of activities the child consider pleasant.

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No suggestion of constitutional signs or symtoms should be evident, and the physical examination will either be normal or abnormal in a fashion incosistent with organic dysfunction. (S.L. Boyer, and Hollister, 1984).

Children with this type of picture frequently have a history of minor emotional difficulties, and it is common to find that the patient and/or family has been under an increase amount of stress prior to the onset of symptoms. (Maloney, 1980)

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AIM OF THE WORK

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AIM OF THE WORK:

1) Review of litrature about the problem of limb pain in infancy and childhood in order to find out the most common causes of limb pain.

2) Conduct clinical study on the Egyptian children to find out the different causes of limb pain.

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REVIEW OF LITERATURE

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ETIOLOGIC CLASSIFICATIONS OF LIMB PAIN

Different causes of limb pain can be classified according to the etiology into organic or non-organic (functional) causes. (S.L. Boyer, and Hollister, 1984) , (Peterson, 1986).

ORGANIC CAUSES OF LIMB PAIN

I- CONGINTAL

1- Dislocaiton, subluxation or dysplasia of hip.

2- Discoid meniscus.

3- Tarsal coalition.

4- Accessory tarsal ossicle.

5- Generalized ligamentous laxity with hypermobile joints.

II- TRAUMAIC:

1- Fractures.

2- Stress fracture.

3- Pathologic fracture.

4- Dislocation and subluxation

5- Joint strain, sprain, internal derangement.

6- Chondromalcia patella.

7- Knee overuse syndromes.

8- Quadriceps malalignment syndromes.

9-Compartement syndromes.

10-Tendenitis, fasciitis, bursitis

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11-Soft tissue contusion and hemorrhage

12-Myositis ossificans .

13-Traumatic periostitis.

14-Traumatic synovitis or hemorthrosis.

15-Battered child.

III- INFECTION:

A- BACTERIAL:

1- Osteitis.

2- Osteomyelitis.

3- Diskitis.

4- Septic Arthritis.

5- Poliomyelitis.

6- Pyogenic myositis.

7- Soft-tissue abscess.

8- Cellulitis and ascending lymphadenitis.

B- VIRAL:

1- Toxic synovitis.

2- Transient synovitis.

3- Rubella vaccination.

4- Viral myositis.

5- Infective polyneuritis (Guillan- Barre' syndrome).

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IV- AVASCULAR NECROSIS OF BONE:

1- Femoral capital epiphysis (legg- calve- perthes disease).

2- Tibial tubercle opophysitis (osgood-schlatter's disease).

3- Calcaneal apophysistis (Sever's disease).

4- Second metatarsal (Freiberg's infarction).

5- Osteochondritis dissecans (hip, knee, ankle).

V- VASCULAR:

1- Haemangioma, lymphangioma.

2- Anterior and posterior comportement syndromes.

3- Sickle cell intravascular stasis and thrombosis.

4- Hemophilia.

5- Poor peripheral circulation.

VI- DEVELOPMENTAL:

1- Peripheral neuropathy (spasm, pain, etc..) from nerve root irritation or spinal cord syndromes.

2- Slipped capital femoral epiphysis.

3- Popliteal cyst.

4- Limb deformities such as genu vulgum, ankle vulgum, flat foot, bunions.

5- Infantile cortical hyperostosis (caffey's disease).

VII- COLLAGEN VASCULAR CAUSES :

1- Juvenile rheumatoid arthritis.

2- Systemic lupus erythematosus.

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