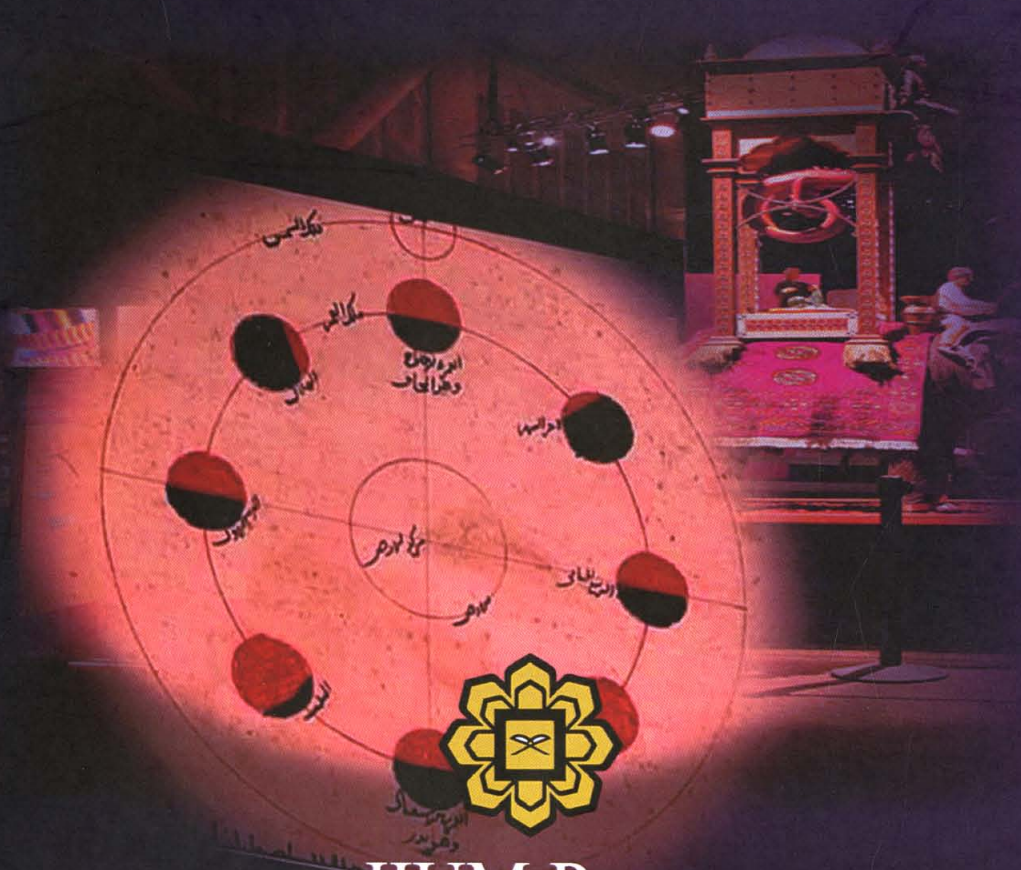


Contributions of Muslim Scientists to Medicine and Related Sciences

Abdi O. Shuriye
Raihan Othman



IIUM Press

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

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Published by:
IIUM Press
International Islamic University Malaysia

First Edition, 2011
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Perpustakaan Negara Malaysia

Cataloguing-in-Publication Data

Abdi O. Shuriye: Contributions of Muslim Scientists to Medicine and Related Sciences

ISBN: 978-967-418-155-0

Member of Majlis Penerbitan Ilmiah Malaysia – MAPIM
(Malaysian Scholarly Publishing Council)

Printed by :
IIUM PRINTING SDN.BHD.
No. 1, Jalan Industri Batu Caves 1/3
Taman Perindustrian Batu Caves
Batu Caves Centre Point
68100 Batu Caves
Selangor Darul Ehsan
Tel: +603-6188 1542 / 44 / 45 Fax: +603-6188 1543
EMAIL: iiumprinting@yahoo.com

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CHAPTER TWENTY SEVEN

AL-ZAHRAWI'S EXPLANATION ON BONE FRACTURES AND ITS SURGICAL AND NON-SURGICAL TREATMENTS

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27.1 INTRODUCTION

The main focus in this work is to highlight the detail knowledge concerning bone fractures and its treatments as explained by Al-Zahrawi from his observations and experiences. The significance of this chapter consists of descriptions in orthopaedic diagnosis and treatment by Al Zahrawi. The methodology adopted in this study is library based research and all evidences were collected from reliable sources. Abu Al-Qasim Al-Zahrawi practised medicine and surgery in Cordova. He was also born in Zahra, the neighbourhood of Cordova. His famous book Al-Tasrif, a medical encyclopaedia covering 30 volumes which included sections on surgery, medicine, orthopaedics, ophthalmology, pharmacology, nutrition etc, was the greatest explanation on medicine.

27.2 AL-ZAHRAWI'S EXPLANATIONS ON BONE FRACTURES

Al-Zahrawi had discussed on orthopaedic mainly in dislocation and fracture of bone. As stated in his treatise, Al-Tasrif, he defined a fracture as a separation or fragmentation of a bone (Quazi, n.d. p.1). He found that there are different types of fracture and broken bone. The fracture differs from one to another. According to Al-Zahrawi, fracture of the leg bone differs from fracture of the cranium (head) and fracture of the breast bone differs from the fracture of the back bone. He also found that the fracture of each bone also have their own variations which are fracture without splintering, fracture that occurs along the bone with splinter and projections (bulges) which it is sharp or not and the fracture may be crack. He diagnosed that there were several signs of broken bone such as distortion, protrusion and the crepitus (crack sound) when the physician press the part with hand. Al-Zahrawi also mentioned that if the physician found movement when he manipulates the bone and the distortion or crepitus is not very obvious, and the patient does not feel pain, it is assume that there is no fracture in the part, as stated by Spink and Lewis:

“When there is no obvious distortion or crepitus at the site, nor do you feel movement when you manipulate the bone, and the patient does not experience severe