CONTENTS

CHAPTER	PAGE
1. <u>INTRODUCTION</u>	1
2. ANATOMY AND BIOMECHANICS	2
3. MOTION OF THE ACROMIOCLAVICULAR JOI	<u>NT</u> 13
4. <u>EPIDEMIOLOGY</u>	15
5. <u>MECHANISM OF INJURY</u>	17
6. <u>CLINICAL ASSEMENT</u>	22
7. <u>DIFFRENTIAL DIAGNOSIS</u>	26
8. <u>CLASSIFICATION</u>	29
9. <u>RADIOGRAPHIC EVALUATION</u>	36
10. <u>ASSOCIATED INJURIES</u>	41
11. <u>TREATMENT</u>	45
12.BIOMECHANICAL STUDIES OFACROMIOC	CLAVICULAR JOINT
<u>RECONSTRUCTION</u>	53
13. SURGICAL RECONSTRUCTION OF AC	ROMIOCLAVICULAR
SEPARATION	58
14. EARLY VS DELAYED REPAIR	71
15. POSTOPERATIVE REHABILITATION	75
16. TPYE III ACROMIOCLAVICULAR DISLOCATA	ION CONSERVATIVE
OR SURGICAL TREATMENT	77

17. CHRONIC ACROMIOC	CLAVICULAR DISRUPTION	80
18.ENGLISH SUMMARY	•••••	86

LIST OF FIGURES

f I	GURE NUMBER PAGE
	1Anatomy of acromioclavicular joint7
	2
	3 <u>Dynamic stabilizers of the acromioclavicular joint</u> 9
	4 <u>Mechanism of injury</u> 17
	5 <u>Mechanism of injury descriptive</u> 19
	6 <u>Cross arm adduction test (scarf test)</u> 23
	7Active compression test (O'Brien test)24
	8 <u>Type I injury</u> 30
	9 <u>Type II injury</u> 31
	10 <u>TypeIII injury</u> 31
	11 <u>Type IV injury</u> 32
	12 <u>Type V injury</u> 32
	13 <u>Type VI injury</u> 33
	14Anteroposterior view
	15 <u>Zanca view</u> 37
	16MRI for acromioclavicular joint39
	17Associated injuries42

18 <u>Serendipity view</u>
19 <u>Reconstruction with free tendon graft</u> 56
20 <u>Surgical approach (1</u>)59
21 <u>Surgical approach (2)</u> 60
22 <u>Surgical approach (3</u>)60
2361
24Classic Weaver Dunn with augmentation63
2565
26Introduction of anchors66
27 <u>Radiograph after reconstruction with end buttons</u> 66
28 <u>Fixation of coracoclavicular joint with a screw</u> 68
29 <u>Fixation of acromioclavicular joint by a hook plate</u> 69
30 <u>Measuring coracoclavicular distance on stress view</u> .72
31.32 <u>Technique in chronic disruption using polyester loop</u> 82
33.34 .35 <u>Technique in chronic disruption using gracilis tendon</u> 83 84
36.37 <u>Final view in reconstruction using gracilis tendon</u> 84
38.39Radiorgraph for the final view84

LIST OF TABLES

TABLE NUMBE	R	PAGE
1	<u>Diffrential diagnosis</u>	26
2	Classification	29



<u>Aknolegment</u>

I would like to express my thanks and gratitude to all the efforts which made this essay possible.

I will always be grateful to **Prof**. **Dr**. **Mohammed Ossama Hegazy** professor of orthopedics Benha faculty of medicine who inspired me to start this work and introduced me to the scientific way of thinking and with the creative suggestion through the whole course of this work.

I am grateful to **Prof. Dr. Hassan Huessein Ahmed** professor of orthopedics Benha faculty of medicine not only for his guidance, advice and faithful supervision but also for the positive criticism he provided me to do this work and of course for the sincere help in my career.

I wish to express my thanks **Dr. Elsayed Mohammady Mohammady** lecturer of orthopedics Benha faculty of medicine for his valuable advice and support in making this essay come true and I will never forget the help he provided me in my career.

I would like to thank **Dr. Mohammed Salah Sharaf** assistant lecturer of orthopedics Benha faculty of medicine for his scientific support in this essay.

I also wish to express my thanks & gratitude to the staff members of orthopedic department Benha faculty of medicine for their kind help and co-operation.

To my parents who inspired me through my whole career, will always be grateful for them for their effort in raising me and helping me throughout my whole life.

AIM OF WORK

The aim of work is to study the anatomy and biomechanics of the acromioclavicular joint (AC) and to know the different classifications of its injuries. Knowing the recent trends in treatment of the AC joint injury in athletes in acute injuries and studying the value of surgical treatment in neglected cases and the role of physiotherapy in rehabilitating the athlete in post operative cases and conseravative ones.