

Contents

Acknowledgment

Introduction	1
Historical review.....	4
Surgical Anatomy.....	7
Biomechanics of shoulder and external fixator.....	21
Pathomechanics	47
Management of proximal humeral fracture.....	62
Patients and Methods.....	76
Results.....	103
Discussion	140
References.....	156
Summary.....	171
Arabic Summary	