

A RARE CASE REPORT: BILATERAL WINGED SCAPULA IN A 14-YEAR OLD FEMALE

Stavros Lykos, MD, MSc¹; Pantelis Zogakis MD, MSc¹, Orestis Constantas¹, Christos Zambakides¹, Rodanthi Margariti¹, Panagiotis Kolovos¹, Katerina Catsouli¹, Alexandros Chatzikyriakos¹, Nikolaos Paraskevopoulos¹, Semeli Kaltsa¹, Evangelos Kallaras¹, Angelos Sfyris¹, Evmorfia Pechlivanidou¹, Nikolaos Sekouris MD,MSc,PhD¹ ¹Children's Hospital "P. & A. Kyriakou"

ABSTRACT

The presented case examines bilateral winged scapula in a 14-year-old female, emphasizing a more aggressive surgical approach on the left side.

This case highlights the importance of thorough evaluation and suggests that a more aggressive initial approach may yield improved outcomes, warranting further research.

CONTACT

Stavros Lykos Phone: +30 6978695466

Email: lykosstavros@gmail.com

INTRODUCTION

Winged scapula is the abnormal protrusion of the scapula caused by weakened muscles, trauma, muscle imbalances, or nerve damage. It is a rare, condition that can significantly impact the quality of life due to pain and reduced shoulder mobility. Treatment options are often individualized and include physical therapy or surgical intervention to strengthen the muscles and enhance scapular stability. 1

RIGHT SIDE: Split pectoralis major transfer.

CASE STUDY

However, after three months, a recurrence of dislocation necessitated a second surgery of scapulothoracic fusion.

Pre-operative assessment: medical history, physical examination, x-ray & MRI. 1,2

LEFT SIDE: Supraspinatus muscle elevation and three drills were used: one at the lower angle of the scapula, another proximal to it, and one below the scapular spine. Suture fixation with varying lengths of sutures between the drills and sides of the scapula was performed. ³

Intraoperative joint mobility assessment was successful.

RESULTS

This surgical intervention successfully addressed the left winged scapula. Postoperative evaluation demonstrated improved scapular alignment and restored shoulder function, with better range of motion compared to the other side. Promising outcome were observed at the 6-months follow-up.

DISCUSSION

Different surgical interventions were compared in a single patient. Early diagnosis, comprehensive medical history evaluation, pre-operative planning and consideration of previous surgeries are crucial for determining the appropriate treatment strategy. 1,3 In this patient, more aggressive surgical approach yielded improved outcomes for the patient on the left side.

CONCLUSIONS

Further research and long-term follow-up studies are warranted to evaluate the effectiveness, durability, benefits and complications of this more aggressive initial approach for managing winged scapula. 2,3

OBJECTIVE

This case report presents the occurrence of bilateral winged scapula in a 14-year-old female. Neurological consultation, genetic tests, and electrodiagnostic studies ruled out congenital defects. ¹

The aim is to emphasize the management of the left side using a more aggressive surgical approach.

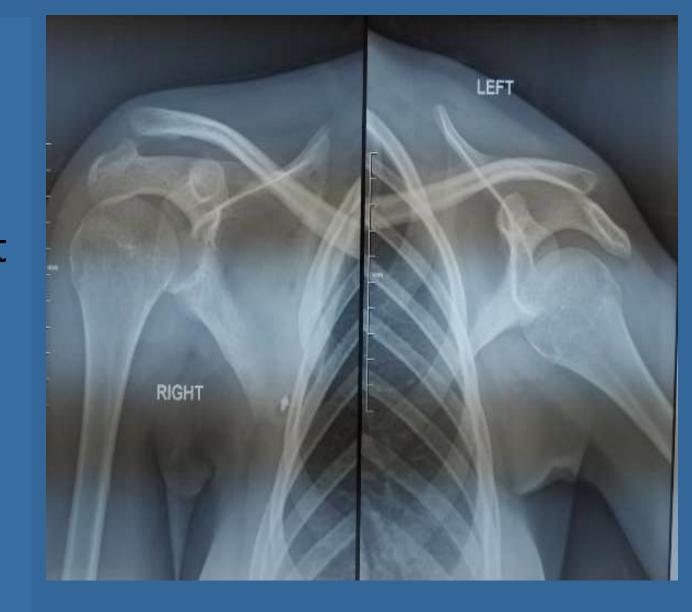


Figure 1. L before surgery, R after.



Figure 2. Right after surgery

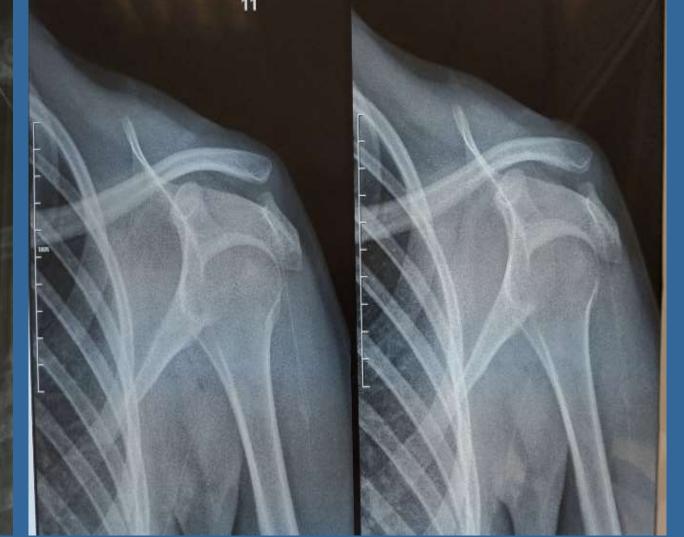


Figure 3. Left after Surgery

REFERENCES

- 1. Nadeau, C., McGhee, S., & Gonzalez, J. M. (2021). Winged scapula: an overview of pathophysiology, diagnosis and management. *Emergency* nurse: the journal of the RCN Accident and Emergency Nursing Association, 29(5), 28-31. https://doi.org/10.7748/en.2021.e2090
- Vetter, M., Charran, O., Yilmaz, E., Edwards, B., Muhleman, M. A., Oskouian, R. J., Tubbs, R. S., & Loukas, M. (2017). Winged Scapula: A Comprehensive Review of Surgical Treatment. Cureus, 9(12), e1923.
- 3. Galano, G. J., Bigliani, L. U., Ahmad, C. S., & Levine, W. N. (2008). Surgical treatment of winged scapula. Clinical orthopaedics and related research, 466(3), 652-660. https://doi.org/10.1007/s11999-007-0086-2