Late Brachial Plexopathy After A Mid-Shaft Clavicle Fracture: A Case Report

Dear Reviewers,

Thank you for your additional review of our manuscript. Your comments are constructive and have been applied in the manuscript. Please find below a point-by-point response to your comments. We have modified the manuscript accordingly and hope that we have addressed all your suggestions. We look forward to your feedback.

Kindly note that all line references in the Author Response section and Text change section refer to the revised manuscript line numbering (unless specifically stated).

Reviewer Remark	Author Response	Revised Manuscript Line Number		
		and text change.		
REVIEWER 1:				
Change "An extremely rare" to "A rare"	Thank you for the comment, this has	Line 19: . An rare cause		
	been revised accordingly.			
Please describe and expand the	Thank you for the comment, we have	Line 20: While these injuries		
incidence of brachial plexus injury with	revised to include incidence of palsy in	are common, an associated brachial		
	all injuries and displaced fractures. but	plexus injury is considered rare with		

the fracture itself, the ORIF, the	for the post-orif incidence we couldn't	an incidence of less than 1%, while
conservative management.	find any studies assessing this as they	this incidence can reach 2% in
	are all case reports.	displaced fractures [1, 2].
Case Presentation: Line 29: multiple	Thank you for the comment, this has	Line 28: Plain radiographs
right sided rib fractures Please	been revised accordingly.	diagnosed multiple right sided rib
describe what was done for that.		fractures (which were managed
		conservatively) and a right mid-shaft
		clavicle fracture.
Line 32: Patient was discharged!! There	Thank you for the comment, this has	Line 33: Patient was
is no mention how the patient was	been revised accordingly.	immobilized in a sling and
treated.		discharged with a follow up in the
		orthopaedic clinic in 2 weeks.
Line 33: 2 weeks post-injury, a mid-shaft	Thank you for the comment, sorry for	Line 34: At the time of the
comminuted clavicle fracture was	the confusion here. This has been	follow up 2 weeks post-injury, plain
documented You mean it the fracture	revised accordingly.	radiographs were performed again
was not discovered except after 2		and re-documented a displaced mid-
weeks?		shaft comminuted clavicle fracture
		was documented on plain
		radiographs

Line 37: patient declined what was the	Thank you for the comment, this has	Linne 38: Patient was offered open
cause	been revised accordingly.	reduction and internal fixation of the
		clavicle fracture, but patient declined
		surgery and opted for conservative
		management and was given follow
		up in 4 weeks.
Line 44: Remove unfortunately	Thank you for the comment, this has	Line 46: but patient was
	been revised accordingly.	complaining of significant right
		upper extremity weakness,
Line 46: loss of sensation in the hand	Thank you for the comment, this has	Linne 48: hand and forearm
and forearm region. whcih areas exactly	been revised accordingly.	region (C7, C8 and T1 distribution).
Line 90:Plain radiographs of the right	Thank you for the comment. We have	Figure-7
clavicle showed progression of the	added a figure to highlight this.	
fracture healing and maintained		
implant fixation. Please add those 6		
months follow-up Xrays		
Did you do nerve conduction studies	Thank you for the comment, the nerve	Line 61: A nerve conduction
prior to the surgery?	conduction study was scheduled for	study was arranged for the patient.
	the patient but the decision was made	But as the patient was exhibiting

	to go ahead with an urgent	significant neurological deficits due
	decompression due to the patients	to brachial plexus compression from
	worsening symptoms. We have	the hypertrophic callus formation, an
	revised the manuscript to highlight	urgent surgical decompression and
	this.	clavicle open reduction internal
		fixation was planned.
Why did you use 2 plates for ORIF?	Thank you for the comment, The	Line 83: then fixed
	anterior plate was a provisional plate	provisionally fixed with an anterior
	to hold the fracture reduction which	contoured 2.7mm reconstruction
	was kept to provide additional	plate and then a superior pre-
	stability.	contoured 3.5mm clavicular plate
		was applied.
REVIEWER 2:		
I suggest the authors to provide some	Thank you for the comment, we have	
images to describe the proximity of the	provided figure 4 to show the plexus	
fracture callus to the brachial plexus,	compression by the callus.	
either intraoperative or in imaging		
examination		

- 1. Saito, T., T. Matusmura, and K. Takeshita, *Brachial plexus palsy after clavicle fracture: 3 cases.* J Shoulder Elbow Surg, 2020. **29**(2): p. e60-e65.
- 2. Kim, M.S., *Conservative treatment for brachial plexus injury after a displaced clavicle fracture: a case report and literature review.* BMC Musculoskelet Disord, 2022. **23**(1): p. 632.