The Magic of Coaptation Splint: A Case of Conservative Midshaft humerus fracture

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INTRODUCTION:

Midshaft humerus fracture accounts about 3 % of all fracture and can be treated either via surgery or conservative depending on the fracture pattern and associated injuries. Commonly in conservative treatment Sarmiento brace will be used however in more rural area where Sarmiento brace is not available, coaptation is the gold standard.

We present a case report of conservative right midshaft humerus fracture using coaptation splint.

REPORT:

A 39 years-old gentleman presented with midshaft humerus fracture after sustained a fall from 12 feet height.

Right humerus radiograph showed a midshaft humerus fracture with a degree of 100 % displacement, 60° varus angulation, 3cm shortening.

Closed manipulation reduction attempted and coaptation splint applied supported by a sling and body strap. Post reduction radiograph, good alignment no angulation with good bone contact (>80%) and no shortening.

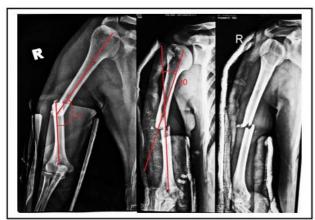


Figure 1: radiograph of right humerus pre and post reduction and splinting



Figure 2: Serial radiographs after 2 months of coaptation splint.



Figure 3: Shows coaptation splint application

CONCLUSION:

Not all fracture required a surgical intervention. Through this case, shown that a good reduction with the aid of coaptation splint provide a relative comparable result to surgical fixation evidence by a perfect alignment with no shortening, no deformity and no radial nerve injury. Once cast is removed, patient required a physiotheraphy to restore muscle strength and range of motion.

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