

Rib fracture management

There is a 10-15% incidence of rib fractures in patients undergoing blunt mechanism trauma (87% ICU trauma pts at BSUH in last 6 months). Risk factors for poor outcome include >3 rib fractured, age >65 and chest infection.

A 2015 audit of rib fractures on ICU there were 52 patients, of which 43 sustained >3 ribs fractured.

To identify patients at risk early the chest trauma pathway uses the Rib Fracture Score (RFS) which is calculated during assessment in ED (see table 1). The aim is for early analgesia, physiotherapy and critical care as appropriate (see fig 1).

As part of this is an analgesic ladder (fig 2) which is to be escalated to achieve adequate analgesia with emphasis on use of regional analgesia early (including serratus anterior catheters).

(BREAKS x SIDES)		+	Age	= Rib Fracture Score (RFS)
BREAKS	SIDES		AGE	
No. of fractures	Unilateral = 1		Less than 50 = 1	
	Bilateral = 2		51 to 60 = 2	
			61 to 70 = 3	
			71 to 80 = 4	
			More than 80 = 5	

Table 1 Rib fracture score calculation

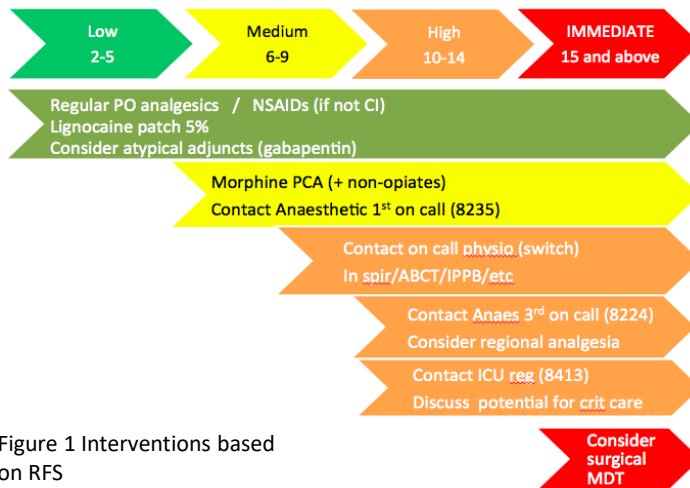


Figure 1 Interventions based on RFS

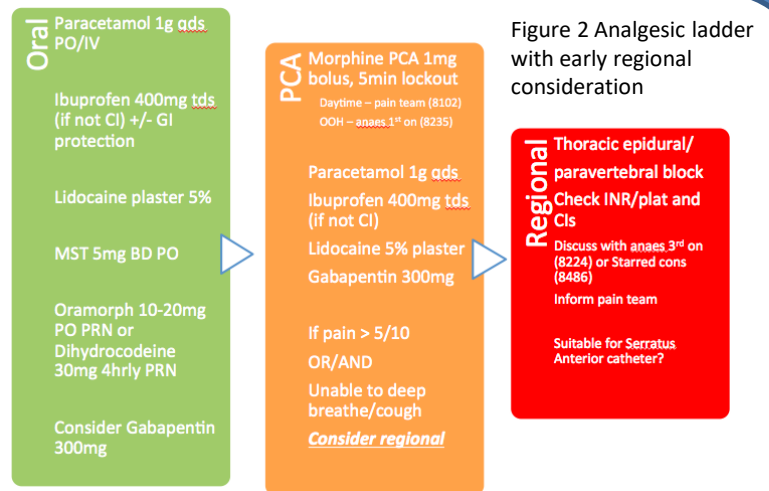


Figure 2 Analgesic ladder with early regional consideration