

Paediatric Trauma

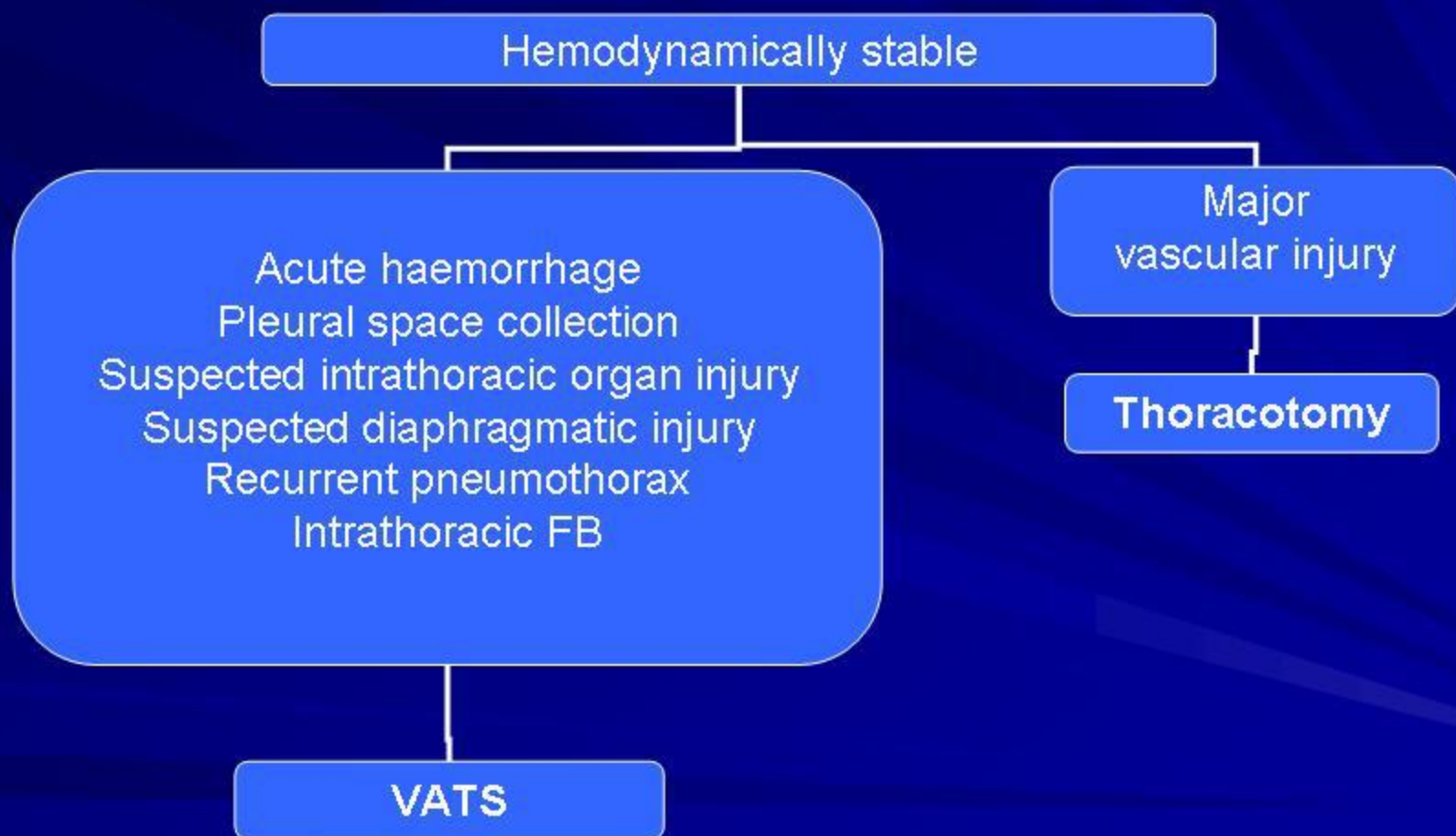
-Penetrating Injuries

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Injury 2006 Auckland 3 August

Management II



Conclusions

- Stab injury to the paediatric spinal cord is rare
- ABC approach
- MRI of spine
- Indications for operation remain controversial
- Spinal injury care starts at time of injury
- A hopeful outlook is appropriate as a degree of recovery will occur in most patients

SUMMARY

PENETRATING TRAUMA (Paediatric)

- Most are single system and simple
 - Feet/eye: needles/sticks
- Occasionally life threatening
 - Need a rapid response gear – code crimson
- Small subset of penetrating trauma are very tricky
 - Few signs: anatomy means thin external tissues
 - History, History, Examination; History in notes, Re-examination

SUMMARY

PENETRATING TRAUMA (Paediatric)

Documented history and examination

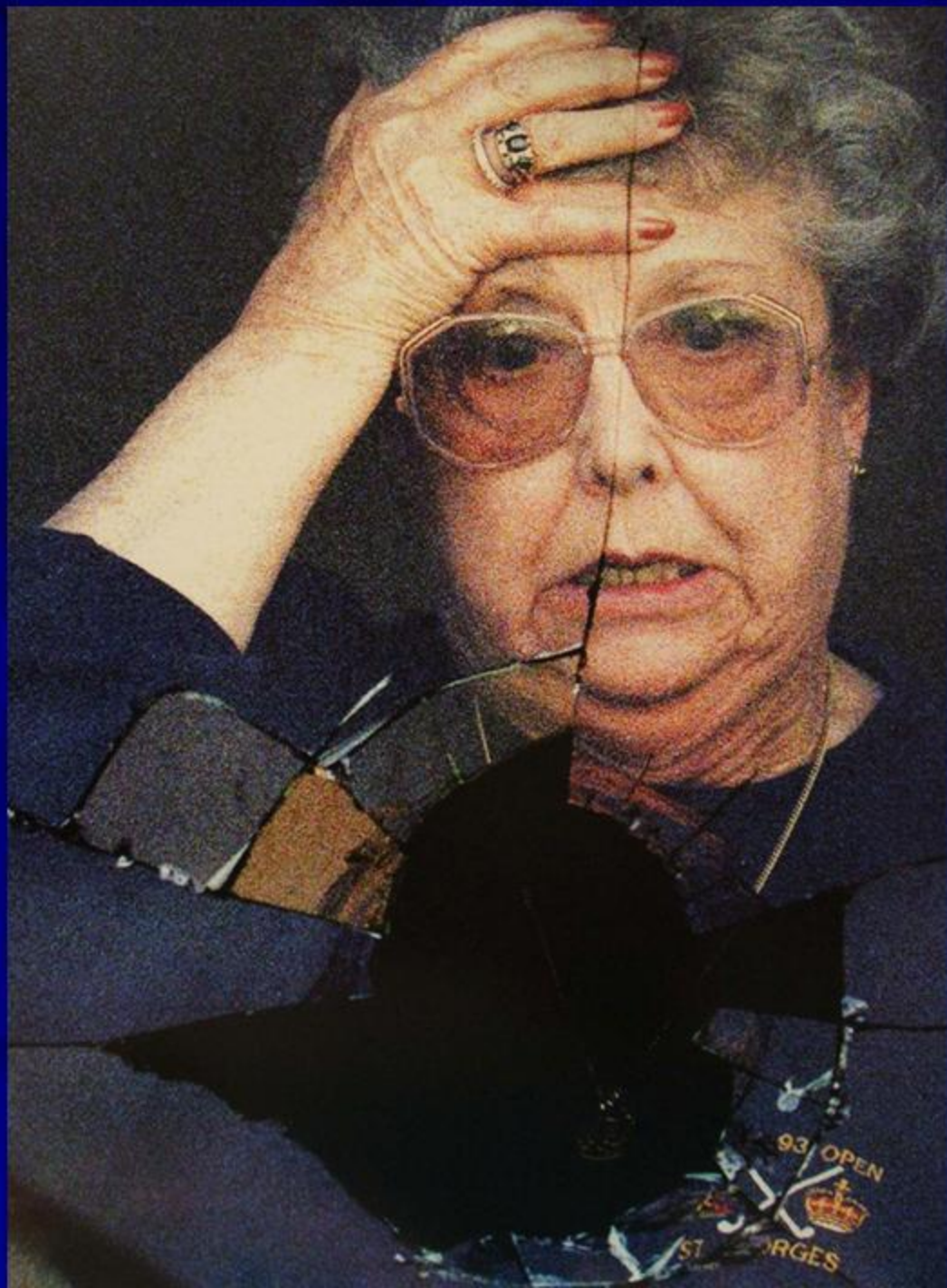
■ Tests

- MRI for spinal

■ Explore any penetrating injury unless the consultant has personally managed 10 similar cases

- Glass, knives: the internal injury is always much greater than appears from the surface lesion





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ST. GEORGES

PENETRATING TRAUMA

(Paediatric)

AIMS

1. Detail the dimension of the problem
2. Describe injuries and treatment
3. Discuss the mental approach

PENETRATING TRAUMA

(Paediatric)

- Definition: to pierce – sharp
 - Not motor mowers or machinery
 - Not dog bites
- Data
 - Jan 1988 to Dec 2000 (13 years)
 - 34 cases {2.6 per year} Paed. Child Health 38: 487 (2002)
 - Jan 2001 to June 2005 (5.5 years)
 - 125 cases {22.7 per year}
 - More complete data collection
 - Increased services (eye)
 - Peripheral Hospitals refer increasing numbers of minor cases

Trauma care

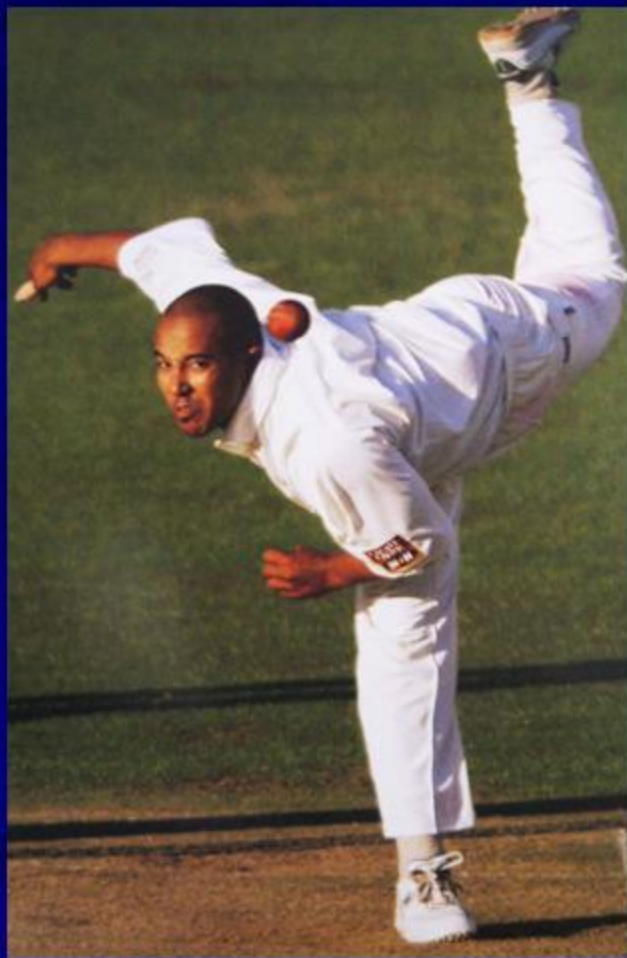
Model of Philosophical approach

When you enter the ED department to assess and then provide definitive care to a trauma patient do you feel like:

1. an Airline pilot: walking to plane with protocol checklist
2. a Cricketer strolling to the batting crease

It's not airlines it's cricket

It's not airlines it's cricket



Penetrating injury - CHW data

Jan 2001- June 2006 (5.5 years)

- 125 patients (1.2% of admission)
- 4 ISS>15 (2.63% of serious injuries)
- 1 death
- 65% male
- Even distribution throughout childhood
 - 0-4y: 46; 5-10y: 44; 11-16y: 35
- Location
 - Home 83%, Park 4%, School 3%
- Assailant
 - Self 80%, Known 12%, Stranger 7%

Penetrating injury - CHW data

Jan 2001- June 2006 (5.5 years)

■ Penetrating Objects

- Needles/Pins **38**
- Wood/Stick **16**
- Sharp Metal **15**
- Knife **10**
 - Stab 5
 - Accidental 5
- Glass/ceramic **7**
- Gun **5**
 - Firearm 1
 - Air/slug gun 2
 - Nail gun 1
 - Spear gun 1
- Pencil/pen **4**
- Umbrella **3**

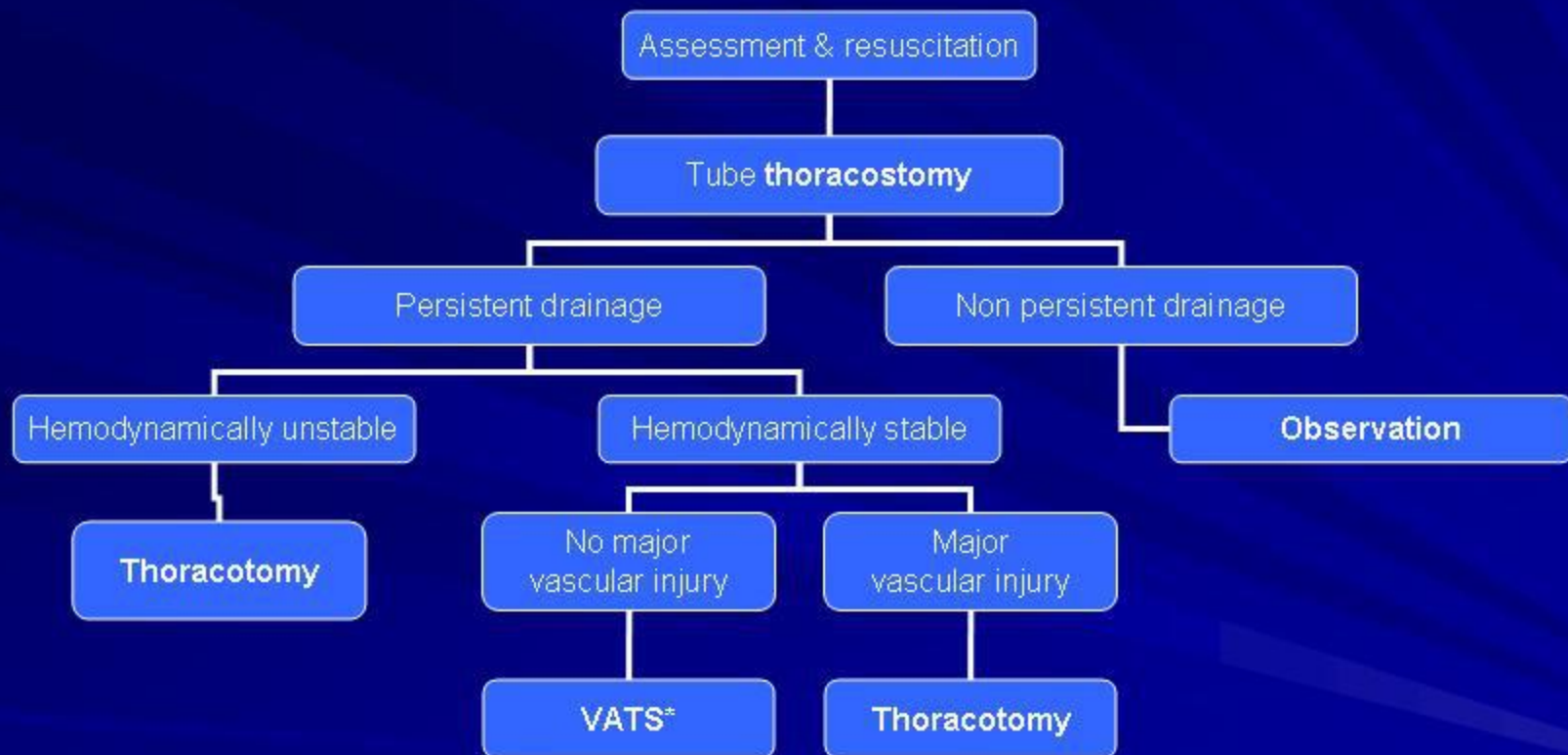
Penetrating injury - CHW data

Jan 2001- June 2006 (5.5 years)

■ Injury type (n = 114)

- Foot 38
- Eye 34
- Hand 9
- Leg 8
- Mouth 6
- Thorax 5
- Perineal 3

Management I



***VATS**: Video Assisted Thoracic Surgery