Emergency thoracic surgery for penetrating, non-mediastinal trauma.

BACKGROUND: Penetrating thoracic injury is commonly found in South Africa. A review of our recent experience was undertaken to assess the effectiveness of our protocols for this type of injury. METHODS: A retrospective study of 61 consecutive patients with penetrating, non-mediastinal trauma to the chest was conducted over 32 months at a single trauma unit. Patient details, mechanism of injury, operative procedure and in-hospital mortality and morbidity rates were recorded. RESULTS: Two thousand and nineteen patients presented with penetrating chest injury of which 61 patients (3%) underwent thoracic surgery for non-mediastinal injury. Twenty-six patients had stab wounds and 35 had gunshot wounds. Overall mortality was 17/61 (28%). Gunshot wounds were more likely to result in death than stab wounds (relative risk = 11.9; 95% confidence interval 1.7-84.0) and thoracoabdominal injury resulted in death more commonly than chest injury (relative risk = 4.8; 95% confidence interval 2.2-10.3) resulted in death. CONCLUSION: Penetrating chest injury is common and most patients can be managed without formal thoracic surgical intervention. However, the patients who do merit surgical intervention have a relatively high mortality and a rapid and practised operative approach is required to achieve acceptable results.