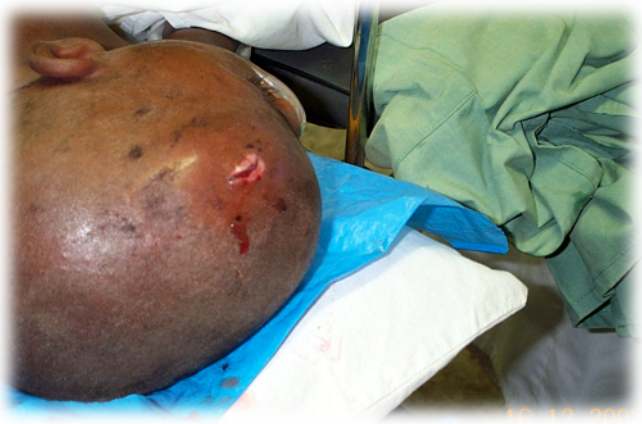
Case Study: The pulsating head wound.

This young fellow presented to the hospital with the story of having been hit on the head with a stone by another lad with a slingshot. There was no loss of consciousness and no detectable neurological signs.

On examination of the wound, there was a 2 cm laceration to the scalp just to the left side of midline in the parietal region. The laceration was slightly ragged, and on examination of the wound there was noticeable pulsation of the soft tissue.

X -ray was unavailable in this district centre at that time and there were no available options for transfer owing to the impassable road.



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Case Study: - continued.

Soft tissue injuries to the scalp are a common presentation in general practice. Whether from a fall or assault, you will see plenty of these in your career. Failure to inspect closely can lead to mistakes, as was nearly the case here. As in most wounds, it can often be difficult to inspect the degree of damage on superficial examination in the outpatient department. The keys are as always – good light, good anaesthesia and a high index of suspicion. With scalp injury you must have a good feel with a gloved digit to rule out a depressed fracture. Bruising deep to the galea can sometimes give the false impression of changes in the contour of the skull vault so you need to be careful. Any pulsation of tissue means communication with the intracranial cavity. In this case on further exposure there was a depressed fracture of both the inner and outer table of the skull bone. Small degrees of depression can be left alone(less than 2-3mm on Xray depending on which text you read). Greater degrees are associated with focal seizure activity and need to be elevated if possible. Try to preserve any periosteal "hinges" to bone – devitalized bone in a compound fracture such as this can lead to infected sequestra much like the situation in chronic osteomyelitis. Make sure you get dura cover over the brain. Nurse at 45 degrees until stable.