

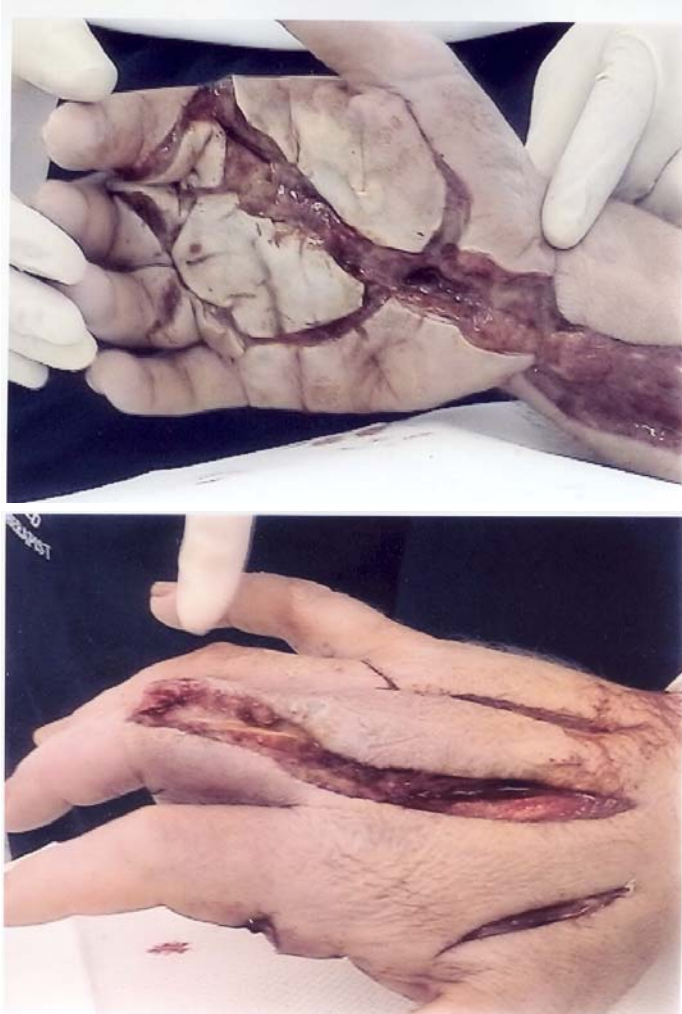
# HYDRAULIC INJECTION INCIDENT

A warning to us all

Aberdeen



## Hydraulic Injection caused a pinprick intrusion to the IPs hand.



- Hydraulic Fluid in use was a Mineral Oil – Unknown at present
- Pressure of fluid was **630Bar**( approx 9,150 psi)
- Equipment in use: Scissor cutters used at Road Traffic Accidents to release occupants.
- Location of Accident: Fire Service Training Ground
- Risk Assessments were in place and Full PPE was worn.



## Events

- Training Session under controlled conditions within Brigade Training Premises
- IP was to cut through sample vehicle using scissors.
- Normal practise at time was for the hydraulic hose to be run over operators shoulder to tool in use.
- Hose ruptured at ferrule area resulting in release of fluid through PPE (Leather gauntlets) to IPs hand.



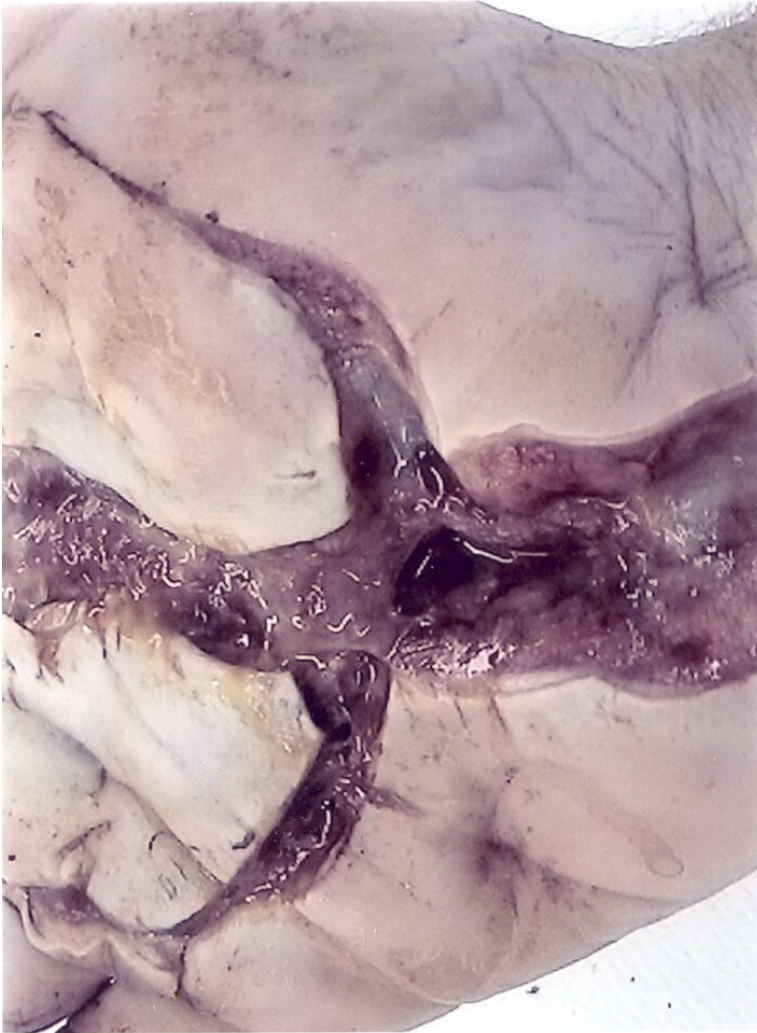
## What Happened Next



- IP went to A&E and initial prognosis was “keep clean and rest”.
- By chance a specialist observed and intervened.
- Mineral Oil had already started to “eat away” fatty tissues in hand and began travelling through the hand and up the arm.
- IP had 5 operations to cut away oil deposits and was on his last chance before losing arm. It was successful
- Wound could not be sutured due to tissue damage by oil so wound was gradually closed over weeks.



## Results



- IP was eventually medically discharged from force and is severely disabled in this hand.
- Hydraulic Fluid in use has been changed to “Aero Shell Fluid 4”.
- Fire Brigade has passed learning's on to its associated Brigades.
- Litigation is in place:
  - IP to Brigade
  - Brigade to Equipment Manufacturers.
- IP awaits final outcome
- Timescale: 2 years and counting

