

Delayed Diagnosis of High Pressure Injection Wound Over a Young Man's Finger: P-33  
A Case Report

蔡依博 李永恆 王宏賓 蔡儀勳 楊聖峰 陳彥名  
衛生福利部豐原醫院骨科部

**Introduction:** A 29 years old male paint-worker had a high pressure paint ink injection injury over his left index finger when he cleaned up a painting gun. The pressure of painting gun is upto 5000psi( i.e. 258585mmHg). After injury, he presented with significant swelling and pain over middle and distal portion of his left index finger, as well as a 0.3cm laceration wound over pulp area. He came to emergency department(ER) one hour after injury and leave ER after analgesic and NSAIDs (Non-Steroid Anti-Inflammatory Drugs) prescription. He came back to ER again 8 hours later due to the pain exacerbated significantly. The swollen lesion extended to metacarpal-phalangeal (MCP) joint level and severe pain presented either passive or active ROM (Range-of-Motion) of IP (Inter-Phalangeal) joint. Surgery for decompression and debridement was done immediately after orthopaedist visiting. Second look was done 4 days later and the wound was kept wet dressing with NPWT (Negative Pressure Wound Therapy) system. Due to poor response to limb salvage procedure, finger amputation was done at the MCP level 7 days after injury. Two weeks after amputation, he returned to his previous work without associated wound problems.

**Discussion:** High pressure injection injuries are rare in incidence but usually with unsatisfactory results. The typical patient is young man, the most common involved site is index or middle finger of non-dominant hand. Most patients have relatively lower psychosocial status. The entry wound of injection is usually so small that un-experienced medical personnel will underestimate the severity as well as its consequence and therefore delay the time to diagnose and treat. In this case, delayed diagnosis and treatment may be the major factor on decreasing the successful rate of limb preservation. Initial decompression without closure may be beneficial to prevent secondary damage on surrounding soft tissue by chemical toxins. More early time to second look may be improving the outcomes also, even though the high amputation rate and poor outcomes on these patients.

**Conclusion:** High pressure injection injuries are rare in incidence but usually result in unsatisfactory outcome and severe sequelae. The tiny injection wound usually made ones underestimate the severe complications and awful outcomes. We reminded all medical personnel in emergency department and surgery department should take extremely high attention on this kind of patients in order to avoid delayed diagnosis and to improve the outcomes.

Fibrolipoma of the Digital Nerve : A Case Report

P-034

黃柏樺 林承志 林茂仁 許弘昌  
中國醫藥大學附設醫院 骨科部

**Introduction:** Fibrolipoma of the nerve is a benign tumor, which affects the major nerves and their branches in the human body. It is often found in the median nerve of the hand, but it is rarely found in the digital nerves at the peripheral level. We report an rare case of fibrolipoma of the digital nerve of the ring finger

**Materials and Methods:** A 33-year-old man presented with a protruding mass on the ulnar side of the left ring finger that had slowly developed for five years. No sensory symptoms or motion limitation was noted. Physical examination showed a firm, smooth, non-tender mass over volar-ulnar aspect of left ring finger. Sensation and movement of ring finger were normal. Plain X-rays yielded normal findings. Magnetic resonance imaging (MRI) demonstrated a large fusiform mass along the ulnar digital nerve of the ring finger. Surgical exposure revealed a 13x1.3x1.5 cm yellow, sausage-shaped enlargement of the ulnar digital nerve by anomalous growth of fibrofatty tissue. Because gross excision without damage to the affected nerve was difficult, total resection of the affected nerve was performed.

**Results:** The diagnosis of fibrolipoma of the digital nerve was confirmed by histological examination. During the 8 months of postoperative follow-up, the patient reported sensory loss without significant motor deficit. However, the surgical outcome was satisfactory in the esthetic aspect. No evidence of recurrence was found.

**Discussion:** Fibrolipoma of the digital nerve is a rare benign tumor. To our knowledge, fewer than 10 cases of fibrolipoma affecting digital nerves were reported in the English literature. The MRI appearance is unique and characteristic by so-called cable-like lesion. Treatment of this lesion has been controversial. Though surgical outcome with radical resection of affected nerve in the present case was satisfactory, conservative treatment or limited excision with preservation of major nerve branch was suggested.