

CMC joint dislocations can be easily missed and failure to diagnose this injury may predispose the patient to pain and weakness of grip.<sup>1</sup> Careful radiographic evaluation is paramount. Postero-anterior (PA), oblique and true lateral views of the injured hand should be obtained. Loss of convergence of the metacarpal cascade lines on the PA view is a key radiographic sign (see Figure 1a). The intermetacarpal angle, i.e. the angle between best-fit lines drawn down the medullary canals of the 2nd, 3rd and 5th metacarpals, is normal in volar dislocations and should not be used in isolation to exclude these injuries.<sup>1</sup> If clinically suspicious, additional views should be obtained with the forearm rotated to identify any displacement of the 5th metacarpal base obscured by superimposition of the central metacarpals.<sup>4</sup>

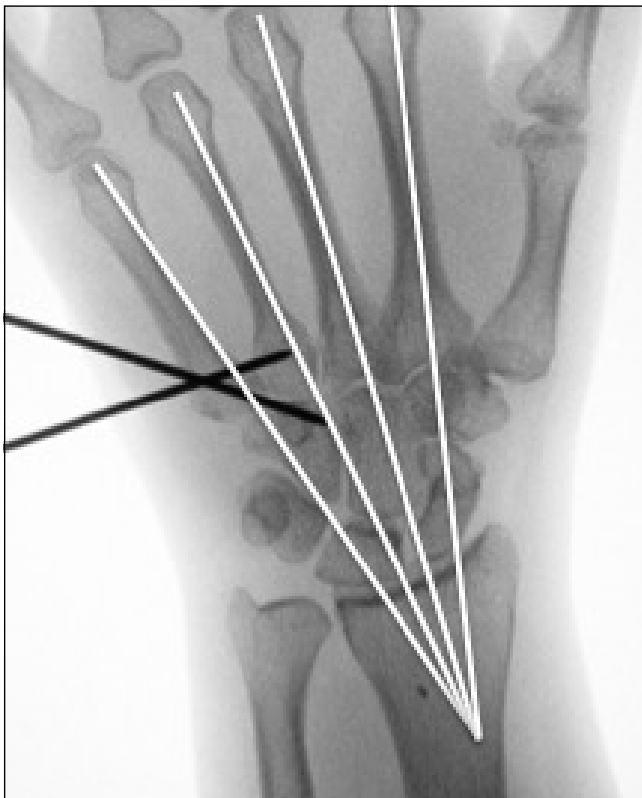


Fig 2. Intra-operative screening image demonstrating reduction and wire fixation of the 5th CMC joint with restoration of convergence of the metacarpal cascade lines (4 converging white lines).

Closed reduction of the dislocated 5th CMC joint and cast immobilisation is an option, however due to the degree of soft tissue disruption the injured joint is often unstable, as in our case, and temporary percutaneous wire fixation is required to restore joint stability and facilitate soft tissue healing.<sup>1,2,5</sup> Open reduction may be required where there is soft tissue interposition preventing closed reduction of the dislocated joint or in cases of delayed diagnosis.

In summary, isolated volar dislocation of the 5th CMC joint is a rare injury. Careful analysis of the injury radiographs and further views of the injured hand can reduce the risk of a missed dislocation. Reduction and temporary wire stabilisation of the injured joint is recommended.

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#### DO ALL PATIENTS WITH SALMONELLA INFECTIONS REQUIRE A 'PET' SCAN?

Editor,

A 70-year-old gentleman with Diffuse Large B Cell Lymphoma (DLBCL) was admitted to the haematology unit with neutropenic sepsis. He had a background of Benign Prostatic Hyperplasia, IHD, Duodenal Ulcers and previous cataract surgery. He was diagnosed with DLBCL 3 months previously and had undergone 3 cycles of RCHOP and one course of intrathecal methotrexate. The patient felt warm and sweaty at home, but had no other infective symptoms. On arrival the patient had a temperature of 38.0 °c. His clinical examination was normal, chest X-ray and urinalysis were also normal. The patient's bloods were as follows; HB 90, WCC 0.3, Plts 116, Neuts 0.1, CRP 123. The patient was diagnosed as having neutropenic sepsis and treated with IV Tazocin and given a STAT dose of IV Gentamicin. This was the patient's second admission in three weeks with neutropenic sepsis. Initially during his first admission blood cultures were positive for Salmonella enteritidis and the patient had a 7 day course of IV Meropenem, and with clinical improvement he went home on an oral course of amoxicillin.

On this occasion, the patient's peripheral blood cultures once again grew Salmonella enteritidis. The Microbiology team advised to stop IV Tazocin and instead give a six week course of Intravenous Ceftriaxone. He continued to have temperatures for the first 10 days of his admission, however these subsequently settled. They also advised imaging of his aortic arch to ensure that there was no endovascular origin of the infection. He had a CT scan of his chest, abdomen and pelvis and this had no evidence of mycotic aneurysm



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or any other source of infection. An Echocardiogram did not reveal any vegetations. The patient had not been on any recent holidays and he had not been in contact with anyone who was unwell. It was unclear as to why this immunocompromised patient had two episodes of Salmonella associated neutropenic sepsis.

The patient's daughter, had been doing some research into Salmonella infections and noted a link with reptiles. It transpired that the patient had been living with his son, who kept pet snakes. Salmonella can be found in the gut of reptiles, and they 'shed the bacteria in their droppings'.<sup>(1)</sup> The bacteria, via the droppings can 'spread over the reptile's skin' and therefore contaminate any surface or person coming into contact with it.<sup>(2)</sup> Furthermore snakes (as in this case) are often fed frozen rats, another source of salmonella.

The patient finished his course of Ceftriaxone and recovered well. His interim PET scan showed an excellent response and he went on to complete therapy - 6 cycles of RCHOP, 4 cycles of intrathecal methotrexate followed by radiotherapy to the contralateral testes. All the snakes have been moved

from his house and it has received a 'deep clean'. Furthermore his son has promised to ensure good hand hygiene and to change his clothes after contact with the snakes and their food. This fascinating case highlights a rare but important cause of recurrent infections in an immunocompromised patient. We propose that medical staff should remember to carry out a 'PET scan' when coming across Salmonella infections.

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