Mycobacterium Marinum Infection Of The Hand

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INTRODUCTION:
Mycobacterium marinum infection is an uncommon cause of swelling on the upper extremity. Below, we report a case of Mycobacterium marinum infection of the digit.

CASE REPORT:
A 53-year-old fisherman presented with a painful swelling over the dorsum of the proximal interphalangeal joint of the right ring finger for the past 4 months following a prick by a fish fin. The swelling progressively increased in size but hand function was unaffected. The swelling was 4 x 3cm, firm in consistency with no surrounding skin changes. Plain radiograph revealed a lytic changes to the head of the proximal phalanx. Incisional biopsy was performed. Intraoperatively, the lesion extended deep through the extensor tendons with bony involvement. Polymerase chain reaction testing confirmed the presence of Mycobacterium marinum. Histopathology revealed a caseating granulomatous inflammation with mycobacterial infection.

DISCUSSION:
Mycobacterium marinum infection develops after exposure to aquatic environment following skin breakage. Infection is usually limited to the skin but deeper infections have been reported. This organism is confirmed only by isolation of the bacteria via positive cultures with the Lowenstein – Jensen medium or by molecular identification. Polymerase Chain Reaction identification is fast and sensitive but has a high false-positive.

CONCLUSION:
A high index of suspicion and communication with the pathologist is important in diagnosis Mycobacterium marinum infection. Individuals who are at risk of developing the infection should be made aware of its diagnosis and be advised on preventive measures of infection.

REFERENCES: