

Images in Clinical Medicine



Mycobacterium marinum Infection of the Hand

A 35-year-old laboratory researcher who was working with *Mycobacterium marinum* abraded the back of her left hand, and a tender, erythematous nodule developed (Panel A). Over the next few days, small amounts of yellowish fluid were discharged from the lesion and a line of tender, nodular lymphangitis appeared, extending from the medial aspect of the elbow approximately one third of the way up the arm. The nodules were approximately 0.5 cm in diameter, and there was no erythema of the surrounding skin. Gram's staining and acid-fast staining of the discharge from the lesion revealed inflammatory cells but no bacteria. Culture of the discharge on Middlebrook 7H9 agar supplemented with 0.5 percent glycerol, 10 percent oleic acid–albumin–dextrose complex, and 0.01 percent cycloheximide revealed the typical photochromogenic *M. marinum* colonies, which are white when grown in the dark and turn a brilliant yellow soon after exposure to light (Panel B). Acid-fast staining of a colony showed the typical, slender, acid-fast bacteria. The lesion and the lymph nodes regressed completely after four months of therapy with rifampin and ethambutol. Because it grows best at a low temperature, *M. marinum* usually causes only a local infection on the hands of humans exposed to contaminated water, usually through contact with a fish tank or swimming.

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