

*Terrance Kwiatkowski, MD; Howard Levine, MD*

*Case Report:*

RB is a 41-yr/old otherwise healthy male construction worker with new onset of left ear/mastoid pain, headache, erythema and moderate tenderness. He was seen by his primary care doctor who prescribed a Z-pak and cortisporin ear drops.

The patient had partial improvement after 48 hours, but began to worsen at 72 hours, and was seen a day later in the E. D. with a headache, altered mental status, a red eardrum, erythematous and tender mastoid and a WBC of 27000. He was admitted for IV antibiotics and observation. Brain CT was normal except for left mastoiditis with questionable erosion of bone overlying the sigmoid sinus. ENT was consulted and a myringotomy tube was inserted in the hospital day 2. He improved clinically, and was discharged home after one week of IV Unasyn and Floxin ear drops.

On follow-up ENT exam, the patient was experiencing increased drainage, headache, intermittent fever, and disequilibrium. The patient was re-admitted to the hospital, and an MRI with gadolinium was obtained which showed marked dural enhancement overlying the left temporal bone and sigmoid sinus. Neurotology was consulted, and the patient was taken to the OR for wide field mastoidectomy. Surgical findings were significant for massive granulation tissue in the middle ear and mastoid, as well as severely osteitic and brittle bone overlying the dura of the posterior fossa and sigmoid sinus. Intraoperative cultures were obtained which revealed gram positive cocci and ultimately grew staph aureus. The patient was placed on IV vancomycin and discharged home on the third postoperative day. Arrangements were made for home IV vancomycin therapy for 8 weeks.

The patient tolerated the therapy well, and vancomycin peak and trough levels were within therapeutic range throughout treatment. He was seen postoperatively several times during therapy and demonstrated excellent recovery. The patient returned to work as a construction foreman on post-operative week three while undergoing the home IV therapy. Repeat MRI/MRV at the end of therapy revealed minimal to negligible dural enhancement, and excellent flow in the sigmoid sinus.

Therapy was discontinued after six weeks, and the patient has done well every since.