Recurrent Bilateral Parotitis in Acute Myeloid Leukemia

A 62-year-old male with newly diagnosed acute myelomonocytic leukemia developed bilateral acute parotitis 3 days following initiation of chemotherapy with cytarabine (100 mg/m²/day in continuous infusion for 7 days) and daunorubicin (45 mg/m²/day for 3 days). Rhinoscopy and otoscopy were without abnormal findings and a normal salivary secretion from both Stensen’s ducts was seen. Repeated serology for mumps virus was negative. The parotitis persisted throughout chemotherapy administration and resolved promptly upon discontinuation of the drugs. Serum amylase levels which were elevated during the active process (2,200 Somogyi U/dl, all salivary isozyme) returned to normal several days after resolution of the parotitis.

After 2 years of hematological remission, the patient sustained a relapse, and reinduction with the same regimen was started. Again, bilateral parotitis was noticed 2 days following the initiation of chemotherapy and persisted during the course of treatment. A comprehensive literature search did not reveal previous reports of parotitis associated with any cytotoxic treatment. From our case, it seems that certain chemotherapeutic agents like cytarabine and daunorubicin should be added to the list of drugs that may cause this entity.

References