Formation of two consecutive intrathecal catheter tip granulomas within nine months

Petra Hoederath, M Land, Gerhard Hildebrandt & Jean-Yves Fournier

The formation of catheter tip granulomas is an increasingly observed serious complication of intrathecally administered medication. This complication, which is frequently associated with neurological disturbances, has previously been attributed to high dosages and high concentrations of intrathecal morphine. Much less commonly, intrathecal hydromorphone and intrathecal baclofen have also been associated with intrathecal granuloma formation. In the current case, we report a patient who developed her first catheter tip granuloma after 20 months of intrathecal morphine. After surgical granuloma removal and installation of a new catheter, the patient received intrathecal ziconitide for an interim period of six months. Because of a progressive inefficacy, ziconitide was replaced by hydromorphone. One month later, only nine months after the first operative granuloma removal, a new catheter tip granuloma required a further surgical intervention. This case report highlights the potential of intrathecal morphine and hydromorphone to form consecutive inflammatory granulomas within the same patient. To the best of our knowledge, this is the first report of a patient developing two consecutive catheter tip granulomas within nine months.