Twiddler’s syndrome: a rare hardware complication in intrathecal drug delivery system (IDDS)

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Twiddler’s syndrome is an uncommon hardware complication involving the lead and pulse generators in cardiac pacemakers and defibrillators, deep brain stimulators, and vagal nerve stimulators. However, until very recently, it had been reported rarely in intrathecal drug delivery system (IDDS).

Considering the incidence of hardware complications of IDDS, there may be an under-reporting of Twiddler’s syndrome due to lack of awareness. A case of Twiddler’s syndrome as a hardware complication of IDDS was reported in 2002 (Neurology). One patient with difficulty in refill of morphine sulfate due to Twiddler’s syndrome at post-implantation 7 month is presented. During revision of the pump, coiling of the lead and twisting of pulse generator in a loose implantation pocket was found. A new intrathecal catheter was placed and extension cable was subcutaneously tunneled, and connected to a new abdominal pocket. Analgesic effect of IDDS regained after revision of intrathecal catheter and repositioning of the pump (1 mg/day, morphine sulfate).

Twiddler’s syndrome in patients treated with IDDS is an uncommon but important adverse event. Awareness of characteristic presentation and radiologic finding is essential in identification of Twiddler’s syndrome in IDDS.