

Acute pancreatitis after severe ophthalmic adenoviral infection

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To the editor,

Viral etiology of acute pancreatitis (AP) is well established but there have been only isolated case reports of AP following viral infections, most commonly coxsackie and mumps virus infections (1). The role of viral infections in the etiopathogenesis of pancreatitis has been examined in both animal and human studies (2), also Tanimura *et al.* defined necrotizing pancreatitis associated with adenovirus infection in chickens (3).

Adenoviruses cause a variety of diseases such as pharyngoconjunctival fever, follicular conjunctivitis, epidemic keratoconjunctivitis, myocarditis, hemorrhagic cystitis and acute diarrhea and invagination (4). They are common opportunistic pathogens and are rarely associated with severe clinical symptoms in healthy individuals. In contrast, in patients with compromised immunity, they often result in disseminated and potentially life-threatening disease (5). Infection frequently involves the organ system transplanted but disseminated disease involving the brain, spleen, bladder, lymph nodes, pancreas, eyes, and cervix also has been reported. Disseminated disease occurs rarely in the immunocompetent patients; however, fatal reports of adenoviral infections have been described in previously healthy children and military recruits (6).

A 65 years-old male patient was admitted to hospital with the complaints of abdominal pain, nausea and vomiting. His past medical history was unremarkable. Furthermore, he has not been receiving any medication or drinking alcoholic beverages. His axillary temperature was 38°C. Chest and abdominal X-rays were all normal. Abdominal examination revealed epigastric tenderness with a mild abdominal distension. There was severe conjunctivitis in his both eyes. It was started nearly 10 days before, as an erythema and progressed rapidly (Fig. 1). He was consulted to ophthalmologist; subepithelial punctate keratitis was detected and he was diagnosed as adenoviral keratoconjunctivitis. In laboratory findings there was marked elevation of amylase (30 folds), lipase (15 folds) and liver enzymes (6-8 folds) which was confirming AP.

Hepatobiliary ultrasonography revealed normal gallbladder without any gallstones, hepatobiliary ductal dilatation or pericholecystic fluid. Magnetic resonance cholangiopancreatography and dynamic contrast-enhanced abdominal computed tomography revealed



Fig. 1. — Severe keratoconjunctivitis in both eyes of the patient.

perihepatic, perisplenic, pelvic free fluid and a significantly edematous appearance and enlargement of pancreas with no signs of biliary obstruction. Because of his high fever, blood cultures were taken and imipenem was started. In his follow-up blood cultures were negative and serum amylase, lipase and liver enzyme levels were returned to normal in a week time. After supportive and conjunctivitis treatment, he recovered in twelve days time without any complications.

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Diagnosis of viral conjunctivitis is made on clinical grounds only, although it is possible to culture virus from the conjunctiva during acute infections, the expenses and low recovery rate makes this as a rarely used tool (7). Subepithelial punctuate keratitis can be a pathognomonic sign for adenoviral keratoconjunctivitis and usually persists 2-3 weeks as seen in our patient. Other viral infections such as herpetic keratitis should also be thought in differential diagnosis. But in herpetic keratitis, dendritic ulcer is the characteristic finding. The absence of typical herpetic lesions of lids or cornea and longer course of the eye involvement are the findings supporting the diagnosis of adenoviral keratoconjunctivitis. So AP of this patient after excluding the other etiological factors was thought to be related with the adenoviral eye infection which was disseminated to pancreas in a person whose immune system was intact.

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