RESEARCH ARTICLE

A CASE REPORT OF ACUTE PANCREATITIS DURING CHICKENPOX INFECTION.

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Introduction:

Varicella-zoster virus (VZV) is a common infectious disease that mainly affects children. It usually follows a benign, self-limited, clinical course, and typically resolves spontaneously, healing without significant sequelaes.

The most common local complication is the superinfection of the skin lesions. Visceral involvement is an uncommon complication of VZV infection and is reported to occur mainly in immunosuppressed patients, most of whom have an associated malignant disease 1.

We report the case of an immunocompetent patient who presented an acute pancreatitis episode as a complication. We briefly review the visceral involvement of VZV.

Case Report:

An 80-year-old man with fever of 4 days evolution, involving the presence of a constant abdominal pain predominantly located in the right upper quadrant and that had been associated with nausea for 24 hours, was admitted to hospital and cared for by the Internal Medicine Service. Three days after the onset of fever, he developed an eruption on his skin. Seven days earlier he had visited his grandson who was suffering from a similar skin condition. The patient had diabetes type II, which was being treated with a combination of glibenclamide (5 mg bid) and metformine (500 mg/day), and arterial hypertension, which was being treated with valsartan (160 mg/day).

Physical examination showed a diffuse skin eruption with multiple small vesicular and maculopapular lesions on the face, neck, chest and abdomen (Fig. 1A).

Blood tests revealed the following: haemoglobin: 15.2 g/dL (13-18 g/dL); haematocrit: 43% (40-54%); mean corpuscular volume (MCV): 88.6 fL (80-98 fL); HCM 30.8 pg (27-31 pg); leukocytes 5.250/µL (4.000-12,000/µL); 64.4% neutrophils; platelets: 128,000/µL (130,000-450,000/µL); prothrombin index: 86% (85-110%); fibrinogen: 434 mg/dl (150-550 mg/dl). Liver function tests gave the following results: ALT 65 IU (<41); AST 75 IU (<40); gamma-GT 72 IU (normal <30IU). All biochemistry tests gave results within the normal range, except for levels of sodium (133 mEq/L, range 135-145 mEq/L), potassium (3.3 mEq/L, range 3.5-5 mEq/L), lipase (1006 IU, range 114-286 IU), and amylase (700 IU, range 40-140 IU). Blood and urine cultures were negative. Serological studies of HIV, hepatitis B and C, syphilis, cytomegalovirus, Epstein-Barr virus, herpes type I and II, toxoplasmosis and parvovirus B-19 gave negative results. Varicella-zoster serological studies revealed IgM and IgG positivity. Vesicular cultures revealed a varicella-zoster virus. A chest X-ray was normal. Abdominal computerized tomography (CT) showed diffuse pancreatic oedema and a high density of the head of the pancreas, indicative of acute oedematous pancreatitis (Balthazar severity index: low) (Fig. 1B).

A diagnosis of mild acute pancreatitis associated with varicella-herpes zoster infection was made. The patient was treated with an enteral diet and intravenous acyclovir 10 mg/kg every 8 h for 10 days. The abdominal
pain completely disappeared in three days and the lipase and liver enzymes returned to their normal range upon discharge. Two years later the patient is in good health.

Fig. 1a. Multiple vesicular and maculopapular lesions over the face, neck, chest and abdomen. Fig. 1b. Abdominal CT with intravenous contrast, coronal plane, with increased density of the head of the pancreas.

Table 1: Visceral complications of varicela-zoster virus infection.

<table>
<thead>
<tr>
<th>Visceral complications of VZV infection (References)</th>
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</thead>
<tbody>
<tr>
<td>Acute pancreatitis (1-3,5)</td>
</tr>
<tr>
<td>Varicella pneumonia (4)</td>
</tr>
<tr>
<td>Acalculous cholecystitis (5)</td>
</tr>
<tr>
<td>Gastrointestinal infaration (5)</td>
</tr>
<tr>
<td>Encephalitis (6,7)</td>
</tr>
<tr>
<td>Glomerulonephritis (7)</td>
</tr>
<tr>
<td>Acute miocarditis (8)</td>
</tr>
<tr>
<td>Acute liver failure (9)</td>
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<tr>
<td>Hemolytic anemia (9)</td>
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<td>Henoch-Schönlein purpura (10)</td>
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<tr>
<td>Erosive gastritis (11)</td>
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</tbody>
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Discussion:

We describe a case of acute pancreatitis associated with varicella-zoster primary infection in a healthy old man with a favourable outcome.

The risk of complications from VZV infection is greater in adulthood than in childhood. Such complications have been described predominantly in patients who have serious illnesses and/or who are immunocompromised. The most common visceral complication is pneumonia, followed by encephalitis, myocarditis and acute pancreatitis. Despite the low frequency of complications, their severity makes it necessary to be aware of the range of systemic impacts that varicella virus infection may have (Table 1). The key to preventing an adverse outcome is to diagnose and treat visceral complications early on.

Acute pancreatitis should be considered in the differential diagnosis when it occurs in conjunction with acute abdominal pain during the course of chickenpox.
References: