Non-Pseudomonal Ecthyma Gangrenosum
Non-Pseudomonal Ektima Gangrenozum

Leyla Talan¹, Arzu Okyar², Fügün Yörük³, N. Defne Altıntas⁴

¹ Ankara University, Faculty of Medicine Department of Internal Medicine Division of Critical Care, Ankara, Turkey
² Ankara University, Faculty of Medicine Department of Internal Medicine, Ankara, Turkey
³ Ankara University, Faculty of Medicine Department of Infection Disease and Clinical Microbiology, Ankara, Turkey
⁴ Ankara University, Faculty of Medicine Department of Internal Medicine Division of Critical Care, Ankara, Turkey

ABSTRACT
Ecthyma gangrenosum (EG) is a cutaneous infection commonly associated with pseudomonal sepsis but may be associated with other infectious agents. We are presenting a woman who developed ecthyma gangrenosum caused by Echerichia coli with septic shock. Septic shock still confers a high mortality rate, especially when diagnosis and therapy is delayed. All foci of infection should be closely inspected. Skin and soft tissue lesions may also be the cause. For treatment success, source control is indispensible and surgical intervention should not be delayed if needed.

Key Words: Septic shock, ecthyma gangrenosum, critical illness

INTRODUCTION
Ecthyma gangrenosum (EG) is a rare and characteristic cutaneous infection commonly associated with pseudomonal sepsis. EG is a well-recognized manifestation of pseudomonal septicemia in immunocompromised patient. Although EG development is commonly associated with Pseudomonas aeruginosa, other organisms have been identified less often as the cause. We are presenting a woman with the history of amyloidosis, adrenal failure and end stage renal failure who developed ecthyma gangrenosum on her forearm caused by Echerichia coli with septic shock.

CASE REPORT
A 65-year-old woman presented to the emergency department with the complaints of somnolence, hypotension and erythema on her left forearm. Her past medical history included ulcerative colitis and total colectomy for ulcerative colitis in 1999. Several years with the diagnosis of amyloidosis she was using colchicine 1x 0.5 mg, Behçet’s disease since 1985. For 15 years she had primary adrenal insufficiency for which she had been taking prednisolone 20 mg per day and since 2010 she was on hemodialysis program for end-stage renal failure. She was also using anti-phosphate 3x2 tablet and PPI 1x1 capsule for her medication.

Address for Correspondence / Yazışma Adresi: Leyla Talan, MD, Ankara University, Faculty of Medicine Department of Internal Medicine Division of Critical Care, Ankara, Turkey E-mail: leylatalan@gmail.com
©Copyright 2018 by Gazi University Medical Faculty - Available on-line at web site http://medicaljournal.gazi.edu.tr/
doi:http://dx.doi.org/10.12996/gmj.2018.96
**DISCUSSION**

Septic shock still confers a high mortality rate, especially when diagnosis and therapy is delayed. For treatment success, source control is indispensable and surgical intervention should not be delayed if needed. In septic patients, all foci of infection should be closely inspected. Skin and soft tissue lesions may also be the cause of septic shock. In the first hour empirical broad-spectrum antibiotics must be started. Early fluid resuscitation is started as 30 ml/kg with crystalloids.

Ecthyma begins as painless erythematous macules, with or without vesicles, which soon become indurated with variable pain and evolve to haemorrhagic blisters (1). This patient had been initially evaluated as cellulitis however upon follow up rapid progress over hours alerted the team for a more agressive infection. And as suspected histopathological evaluation of tissue sample was reported as EG. Fluid resuscitation was started according to sepsis guideline with the dose of 30 ml/kg (totally 1500ml). Antibiotics must be started. Early fluid resuscitation is started as 30 ml/kg with crystalloids.

*Table 1.*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>C-reactive protein</td>
<td>31</td>
<td>84</td>
<td>238</td>
<td>184</td>
<td>12,4</td>
</tr>
<tr>
<td>Procalcitonin</td>
<td>12</td>
<td>16</td>
<td>23</td>
<td>13</td>
<td>1,5</td>
</tr>
<tr>
<td>White blood count</td>
<td>21300</td>
<td>30850</td>
<td>29900</td>
<td>26540</td>
<td>10200</td>
</tr>
<tr>
<td>Lactate</td>
<td>4,3</td>
<td>6,8</td>
<td>2,1</td>
<td>0,9</td>
<td>0,7</td>
</tr>
</tbody>
</table>

Urgent surgical exploration, tissue sampling for cultures and histopathological examination and debridement of necrotic areas were performed. There was not any complication while performing surgery or anesthesia. After surgery negative pressure wound therapy system used for surgical area (Figure 3). Patient condition improved over days and she was discharged on the 7th day.

**Conflict of interest**

No conflict of interest was declared by the authors.

**REFERENCES**