

OLGU SUNUMU

ANAESTHETIC MANAGEMENT OF A PATIENT WITH PEMPHIGUS VULGARIS FOR EMERGENCY LAPAROTOMY: CASE REPORT

ACİL LAPARATOMİ UYGULANAN PEMFIGUS VULGARİSLİ OLGUNUN ANESTEZİK YÖNETİMİ: OLGU SUNUMU

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ABSTRACT

A 52-year-old man with a history of pemphigus and acid peptic disease presented with symptoms and signs of perforation peritonitis. He also had lesions of pemphigus vulgaris throughout the body, involving both nail and mucous membranes. The intubation was performed in an atraumatic manner after induction. The patient was extubated at the end of the surgery and steroids were continued in the perioperative period.

Key Words: Pemphigus vulgaris, laparotomy

ÖZET

Pemfigus ve petik ülser hikayesi olan 52 yaşında erkek olgu, perforasyona ait peritonitis bulgularıyla başvurmuş. Olgunun tınaklarını ve mukoz membranlarını da içeren, tüm vücudundapemfigus lezyonları mevcut. İndüksiyon sonrası atravmatik entübasyon yapıldı. Operasyon sonunda ekstübe edilen olgunun, steroid tedavisi peroperatif dönemde devam ettirildi.

Anahtar Kelimeler: Pemfigus vulgaris, Laparotomi

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INTRODUCTION

Pemphigus results from circulating immunoglobulin G (Ig G) antibodies directed against desmosomes; these antibodies interfere with keratinocyte adhesion. Acantholysis occurs, resulting in the formation of bullae. There are 6 main types of pemphigus and their classification is based on the anatomic features of the lesion and the target antigens recognized by the autoantibodies (1).

Pemphigus vulgaris is an autoimmune disease characterised by bullous eruptions of skin and mucous membranes (2,3). Patients affected by pemphigus vulgaris will occasionally present with associated and characteristic nail changes (3).

Patients with pemphigus vulgaris presenting for surgery pose multiple problems, some of which complicate the anaesthetic management. We described a patient with pemphigus vulgaris who presented with peritonitis secondary to duodenal ulcer perforation and required emergency laparotomy.

CASE HISTORY

A 52 year old man. He had cataract and lumbar disc hernia repair under sedoanalgesia and spinal anaesthesia respectively. 30 year old smoker, with symptoms of acid peptic disease of 30 year duration. Several lesions developed on the tongue and spread to involve the oral cavity. There was minimal restriction of mouth opening secondary to pain from ulcerated lesions (Figure 1). Although the patient had nail involvement (Figure 2).

The patient was taking prednisolone 80 mg/day and imuran 50 mg/day orally. Over 12 hours prior to admission, he developed severe abdominal pain. He was consulted by ear, nose and throat and dermatology doctors preoperatively. On arrival, the patient was found to have signs and symptoms of perforation peritonitis. He was haemodynamically stable. Investigations, namely haemoglobin, renal functional tests, serum electrolytes and electrocardiogram were normal. Exploratory laparotomy was planned.

On arrival in the operating theatre, after obtaining peripheral venous access, 20 mg methylprednisolone and 50 mg ulcuran was administered.



Figure 1 The Picture of mouth with minimal opening.



Figure 2 The Picture of nail involvement

Monitoring including pulse oximetry, non-invasive blood pressure, end-tidal gas monitoring (oxygen, nitrous oxide, desflurane and carbon dioxide). Anaesthesia was induced with thiopental 350 mg and tracheal intubation was facilitated using rocuronium bromide 0.6 mg/kg. The laryngoscope blade and tracheal tube were lubricated. The trachea was intubated with an 8-mm polyvinylchloride tracheal tube. Anaesthesia was maintained with nitrous oxide 50% and desflurane 50% in oxygen. The patient was stable haemodynamically through the procedure. The perforation was closed. The surgery lasted 90 min. At the end of the surgery residual paralysis was reversed with neostigmine 0.05 mg/kg and atropine 0.5 mg and the patient was extubated. He was transferred to post-anaesthesia care unit (PACU). Analgesia consisted of IV tramadol as needed.

DISCUSSION

Pemphigus vulgaris is a rare autoimmune disorder (1), characterised by impaired cell adhesion within the epidermis leading to the formation of intra-epidermal blisters. This bullous disease involves not only the skin but the mucosal surfaces 50-70 % (oral, genital or ocular) as well (2). Esophageal involvement had been reported only among patients with pemphigus vulgaris and not in patients with other forms of pemphigus (5).

The precautions taken before the surgery in the patient with pemphigus vulgaris, can prevent the morbidity and mortality. Putting pressure on healthy skin causes either a bulla or an erosion; this effect is known as Nikolsky's sign (1,2). This is important placing monitoring devices, siting intravenous lines, during airway interventions, the blood pressure cuff. In this patient we avoided the use of application of a spirit swab before insertion of intravenous cannula. Perioral scar lesions can restrict oral opening. 75% of cases have intra-oral lesions. Tracheal intubation is potentially dangerous in these patients in view of possible ulceration, bullae and oedema formation. Intense aspiration should be avoided. Lubrication of laryngoscope and tracheal tube, gentle laryngoscopy and the use of small tracheal tube preferred (2). If possible, you should prefer sedoanalgesia or regional anaesthesia. Jeremyam & Torda(6) reported a patient with pemphigus vulgaris who had a cholecystectomy under epidural anaesthesia supplemented with intravenous ketamin. Our patient had a perforated duodenal ulcer for which he underwent upper abdominal surgery, therefore tracheal intubation was mandatory. Aktürk et al (7) reported a patient with pemphigus vulgaris who had a craniotomy operation under general anaesthesia and Yasuda et al (8) reported a patient with pemphigus vulgaris who underwent the removal of a meningioma under general anaesthesia whom tracheal intubation was mandatory like us.

The basic treatment for pemphigus consists of either local or systemic corticosteroid therapy (1,3,4). Additionally appropriate immunosuppressive treatment can successfully control pemphigus vulgaris nail manifestations (3). Corticosteroids taken by mouth have many long term harmful effects,

including adrenal atrophy, abnormal sensitivity to infection, high blood pressure, hypertriglyceridemia, hyperglycemia, cortisone myopathy, erosive duodenitis and stress fracture (1). Pharmacological management of patients is also important. The use of steroids in the presence of acid peptic disease, especially when perforation has occurred, is risky. But withholding steroids may lead to exacerbation of the disease and Addison crisis, so we continued steroids with H₂ receptor antagonists preoperative and postoperative.

Malnutrition due to lesions in the mouth, fluid and electrolyte imbalances due to skin lesions may be seen (9). Ensuring perioperative hydration is of vital importance. We had given intravenous fluids according to the hourly urine output.

In conclusion, oral lesions of pemphigus are a serious problem that can complicate the anaesthetic management of the patients. Airway management should be done carefully and should be kept in mind that an important cause of morbidity in anaesthesia management.

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