

Herpes zoster infection after an uncomplicated cataract surgery: A case report

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ABSTRACT

Herpes zoster is an acute viral infection characterized by painful dermatomal vesicular eruption on an erythematous base. It results from reactivation of latent varicella zoster virus infection that has persisted in dorsal root ganglia. The disease is commonly encountered in elderly and immunocompromised patients. In the current report, we have presented a 70-year-old woman who developed herpes zoster infection on her left subpectoral-dorsal site following uncomplicated cataract surgery. The patient was consulted with dermatology clinic and treated successfully.

Keywords: herpes zoster, cataract surgery, zona

INTRODUCTION

Herpes zoster (HZ), also known as shingles, is the result of reactivation of endogenous latent varicella zoster virus (VZV), which is in dormant stage within sensory dorsal root, cranial nerve, and autonomic ganglia (1). HZ can manifest any time after a primary infection with VZV (i.e., varicella or chickenpox). The activated virus travels back down the corresponding cutaneous nerve to the adjacent skin, causing typically a painful, unilateral vesicular eruption in a restricted dermatomal distribution (2). The diagnosis of HZ is mainly made clinically, based on the distinctive clinical appearance and symptomatology. Laboratory tests are not usually necessary unless the rash is atypical (1).

It is well known that the incidence and severity of HZ infection increases with age and in people with depressed immunity (2). Besides, some triggering factors such as emotional stress, malignancy, presence of chronic illness, use of steroids and immunosuppressive agents, radiation, cryotherapy, liver biopsy, axillar nerve block, spinal surgery, chemical or actinic stimuli, massage and laser therapy were reported previously (1, 3).

The aim of this study is to present a patient who developed acute HZ infection following cataract surgery. To the best of our knowledge, this is the first case report presented systemic HZ infection manifestation following cataract surgery.

CASE PRESENTATION

A 70-year-old woman admitted to the ophthalmology department with the complaint of decreased visual acuity on her left eye for 5 months. She had controlled diabetes mellitus for 10 years in her medical history. The ophthalmic examination revealed senile nuclear cataract in her left eye and she was offered cataract surgery. There were no pathologic changes in her laboratory findings preoperatively and she underwent an uncomplicated cataract surgery. She was prescribed frequent use topical steroid and antibiotic. On the 3rd day of the postoperative period, she admitted to ophthalmology clinic for the first visit. She has no complaint in her operated eye. In her



Figure 1: The typical vesicular rash of herpes zoster can be seen at the left lumbar site of the patient

ophthalmologic examination there were no pathologic findings about surgery and all findings were consistent with normal postoperative process. But the patient stated that she felt sick and weak and had pain and red skin lesions on her left trunk. Physical examination revealed erythematous skin, multiple herpetiform and hemorrhagic vesicles on left dorsal lumbar site (Figure 1).

As a result of the consultation with dermatology department, she was diagnosed as HZ infection. The patient treated with oral acyclovir and topical analgesics, the lesions almost healed and the pain resolved within one month. There was no eye involvement in this process.

DISCUSSION

We reported an elderly diabetic patient who had HZ infection following cataract surgery. The occurrence of

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periocular HZ infection in patients with diabetes mellitus following cataract surgery has been reported in the literature (4, 5). While one report described the occurrence of infection is at ipsilateral V2 dermatome, another one defined it at contralateral dermatome. In both reports, infection site corresponds to periocular region. So, reporters suggested that combination of phacoemulsification surgery and presence of diabetes mellitus caused a locally weakened immunological situation. However, in the current report, the infection site of our patient is not periocular region, it is at lumbosacral region. But our patient had no any immunodeficient condition except diabetes mellitus, similar with those reports. In a study, it has been described that the incidence of HZ among individuals with diabetes was higher than among those without (6). So, the presence of the diabetes in our patient may be considered as a risk factor for occurrence of the HZ infection.

In addition, exposure to emotionally stressful situations predisposes to HZ infection (1) and it's well known that undergoing a surgery is a serious stress factor even though it was performed safely with utmost care. So, we believe that, the relatively high level of anxiety of our patient preoperatively may contribute the occurrence of HZ infection following the surgery.

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