

## Erectile Dysfunction Secondary to Herpes Zoster

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### ABSTRACT

Varicella Zoster is dermatomal neuropathic disease caused by reactivation of varicella zoster virus, characterized by vesico-bullous eruptions. The sacral dermatomal involvement in shingles is a rare phenomenon but well recognized cause of urinary retention, bladder dysfunction but rarely erectile dysfunction. We present a case of sacral herpes zoster with erectile dysfunction in a sexually active adult male.

**Keywords:** Erectile Dysfunction; herpes zoster; Nepal.

### INTRODUCTION

Herpes zoster is dermatomal neuropathic disease caused by reactivation of varicella zoster virus, characterized by vesico-bullous eruptions.<sup>1</sup> Thoracic involvement due to herpes zoster is the commonest one whereas sacral dermatomes is a rare.<sup>2</sup> We report a rare case of sacral herpes zoster in a sexually active male patient leading to erectile dysfunction.

### CASE REPORT

A 45-year-old man presented with history of herpes zoster over the right buttock (S3/S4) with grouped erythematous vesico-bullous lesion with pain (Figure 1).



Figure 1. Sacral involvement of Herpes Zoster.

He also had complained inability to achieve erection during intercourse and it persisted even after the lesions of shingles resolved. The erectile dysfunction was sudden onset, as prior to the eruption, he had no erectile difficulty. He had no feature of urinary retention, difficulty in defecation nor other bladder discomfort. He had no other systemic illness like diabetes, hypertension or history of drug intake.

### DISCUSSION

Varicella zoster is neuropathic viral illness caused by Herpes Zoster virus with dermatomal eruption of vesicles and bulla, along with neuropathic pain over the dermatome. The common dermatome affected is thoracic. Varicella zoster affecting the sacral dermatomes is a very rare but well recognized cause of urinary retention and bladder dysfunction; rarely erectile dysfunction.<sup>3,4</sup> In our patient, the S3 and S4 segments were affected and he had eruption over the right buttock and groin with erectile dysfunction. The pathophysiology behind this mechanism could be explained with nerve involvement. There are various bundles of nerves involved in micturition, erection and ejaculation at the spinal level. The control of erection is mediated by parasympathetic nerves, which arise in the intermediate lateral bundle of S2 to S4 and via the nervi erigentes to the pelvic plexus before passing to the erectile tissue as the cavernous nerves.<sup>5</sup> The erectile dysfunction is the inflammatory complication due to severe local inflammation at S3/S4. As the complication of herpes zoster, post herpetic neuralgia takes a longer time to subside, the erectile dysfunction might be improved.

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## CONCLUSIONS

Herpes zoster, being a common cause of vesico-bullous eruption with neuropathic pain, if sacral dermatome is involved can rarely also but cause erection dysfunction in male besides other urological problems.

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