



KEMENTERIAN KESIHATAN MALAYSIA
HOSPITAL SULTAN ISMAIL

A FLIP THAT TURN A LIFE FOREVER

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Introduction

Sport-related neck injury may happen during exercise with the extent of injury may vary from muscle strains to severe life-threatening conditions. Unsuccessful flips can cause a catastrophic injury such as neck fracture which may lead to complete spinal cord injury (SCI) resulting in paralysis or even death.

Case Description

A 40-year-old Malay gentleman was brought to a healthcare facility due to body weakness following unsuccessful backflip attempt by landing with the hyperextended head.

He was on vacation with the family member doing a few attempts of backflip on the beach. Post trauma he sustained neck pain and was unable to move all four limbs. He was kept on cervical collar and eventually transferred to tertiary centre after successfully securing the airway.

Further assessment revealed that he was quadriplegic with reduced sensation in all limbs.

Computed tomography (CT) cervical shows there

was fracture at the level of cervical 4/5 with cord transection of the spinal cord. He was admitted and proceeded with surgical intervention such as decompression, corpectomy of C5 and anterior cervical plating of C4 and C6 with pyramesh cage. Post operative, there is no significant improvement in patient's neurological function and he is totally dependent.



Figure 1. CT Cervical (Sagittal View)

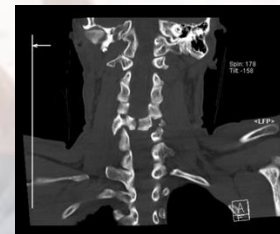


Figure 2. CT Cervical (Coronal View)

Discussion

Spinal protection before reaching hospital is a gold standard to maintain alignment of the cervical spine and to prevent further spinal injury.

Treatment of suspected SCI is really challenging as life-threatening injury such as respiratory failure concomitant with hypotension compounded by both neurogenic shock or spinal shock. This patient

developed both shock hence early initiation inotrope after given fluid resuscitation is appropriate.

There is significance motor and sensory function improvement if administration of methylprednisolone within 8 hours of injury according to National Acute Spinal Cord Injury Studies (NASCIS) II trial.

Conclusion

Resuscitation of life-threatening injury such as hypotension or cardiorespiratory may affect neurologic recovery. Timely intervention and comprehensive care are vital in mitigating the impact of SCI and promoting better patient outcomes.

References

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