

Death Touch Of A Masseur - Cervical Spine Burst Fracture In A Patient With Ankylosing Spondylitis

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ABSTRACT:

Ankylosing spinal disorders (ASD) tend to fracture after minor trauma because of its changed biomechanical properties. These spine traumas, which are located at cervical level in 81% of patients, are complicated by neurological lesions in 65% of patients, due to the high nature of instability of these fractures. Traditional massage is an ancient practice in Asia and other regions. It has many benefits that are currently recognized, even in Western societies. However, it can be dangerous and even lethal if practised without adequate knowledge and skill. We report a case of - C6 burst fracture with complete neurology and neurogenic shock in a middle aged man with undiagnosed ankylosing spondylitis.

INTRODUCTION:

Ankylosing Spondylitis (AS) is a seronegative spondylarthropathy that primarily involves the vertebral column and the sacroiliac joints. The disease has a characteristic caudal to rostral progression and overtime alters the strength and biomechanical properties of the spine via extensive remodeling involving ligamentous ossifications, vertebral joint fusion, osteoporosis and kyphosis. The diagnosis of AS is based on clinical and radiographic factors- (The modified New York Criteria). In this part of the world (Malaysia), a small number of the population tend to seek traditional healers pertaining their health care problems before eventually seeking professional medical advice.

CASE REPORT:

This case report is of a 48y/o man, with undiagnosed ankylosing spondylitis whom has been paying frequent visits to a traditional masseuse for his neck pain which he has been suffering from for years. On his most recent visit, to his horror during the massage he heard a "crack" originating from his upper spine and developed lower limb numbness. On arrival to the emergency department, the patient was noted to be quadriplegic. At this point of time he

was also suffering from bowel and urinary incontinence. Anal tone was lax & bulbo-cavernous reflex (BCR) present. He was also noted to be in neurogenic shock.

Under the impression of a high spinal cord injury, an urgent MRI of the cervical spine revealed: (Figure 1), : burst fracture of the C6 with facet joint subluxation C6/C7, facet and rib joints ankylosis and ligament calcifications, cord compression causing cord oedema. He was immediately advised for surgical intervention however he refused any form of surgery and was adamant on buying just a little bit more time as the masseuse recommended, with hopes he'll be walking again. After much counselling, he eventually came to his senses and agreed for surgery.

X-ray of the spine showed: bamboo spine (Figure 2).



(Figure 1)

(Figure 2)

He was diagnosed with: C6 burst fracture with spinal stenosis and retrolisthesis (ASIA A) with underlying ankylosing spondylitis. We reckon that the injury was caused by excessive hyperextension of the neck during the massage. Patient underwent posterior spinal instrumentation and fusion C4/C5/C7/T1 with laminectomy of C3-C5. (Image 3)

However, despite our best efforts, post operative he showed no neurological improvement & is currently under a spinal rehabilitation regime.

DISCUSSION:

Massage therapy is recognized as one of the oldest methods of healing. Hippocrates,