Eur Spine J
DOI 10.1007/s00586-015-4270-x

CASE REPORT

‘Munchausen syndrome’: a forgotten diagnosis in the spine

Kedar Prashant Padhye[1] · Kenny S. David[1] · Saumil Y. Dholakia[1] · Vivek Mathew[1] · Yuvaraja Murugan[1]

Received: 25 November 2014 / Revised: 30 September 2015 / Accepted: 30 September 2015

Abstract
Purpose To present the case of a patient with Munchausen’s syndrome who underwent multiple surgeries in the spine before the diagnosis was made and, therefore, to highlight the importance of this obscure condition that can result in unnecessary surgical treatment.
Methods A 44-year-old businesswoman presented with multiple episodes of low back pain and weakness in both lower limbs over past 11 years. Past history consisted of multiple hospitalizations, and three surgeries on her lumbar spine at different hospitals, with dramatic improvement in symptoms being reported each time after surgery. Clinical examination showed inconsistent and nonspecific neurological findings. Imaging studies like X-rays, magnetic resonance imaging, and all neurophysiological studies were within normal limits.
Results Multi-disciplinary evaluation by a team of orthopedicians, neurologist and psychiatrist and rehabilitation specialists diagnosed it as ‘Munchausen syndrome’. Only one report of this fictitious disease in spine was found in review of literature (Association AP, Diagnostic and statistical manual of mental disorders: DSM-IV-TR®, 2003).
Conclusions A history of multiple surgical interventions at multiple hospitals, often followed by dramatic improvement and then relapse, should trigger a suspicion of Munchausen syndrome, particularly in the scenario of normal imaging studies. Diagnosing this rare condition in spine is key to avoid unnecessary surgery.

✉ Kedar Prashant Padhye
kedarorth@gmail.com

[1] Christian Medical College, Ida Scudder Road, Vellore, Tamil Nadu 632004, India

Keywords Munchausen syndrome · Fictitious disorder · Lumbar spine · Normal imaging

Abbreviations

L3	Lumbar level 3
L4	Lumbar level 4
L5	Lumbar level 5
S1	Sacral level 1
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders IV
MRC	Medical Research Council

Introduction

Richard Asher coined the eponym ‘Munchausen syndrome’ in 1951, naming the condition after Karl Friedrich Hieronymus, also known as Baron Munchausen (1720–1797), a man who traveled widely and was renowned in his time for telling fantastic and exaggerated stories about his life [1]. Meadow has used the term “Munchausen syndrome by proxy” to describe the fabrication of an illness on behalf of someone else—usually a parent on behalf of a child [2].

In our review of literature, we found only one report of patient undergoing multiple spinal surgeries for factitious illnesses of the spine [3]. We, therefore, report another such case, with the aim of documenting a rare condition that requires careful attention.

Case report

A 44-year-old businesswoman presented with chief complaints of low back pain and weakness in both lower limbs for previous 5 months. She had an extensive past medical

Published online: 28 October 2015

history, dating back 11 years, with respect to her spinal symptoms. At the time of presentation to us, she was not in possession of any imaging studies or hospital records of the initial part of her treatment.

She reported that she was involved in a road traffic accident in her home country in 2002 after which she developed progressive weakness in both lower limbs along with bowel bladder incontinence. There were no imaging studies of that hospital admission available. She reported that she underwent a surgical procedure, which she termed a 'discectomy', and recalled near-complete relief of all her symptoms in the days following surgery, and returned to normal function within few weeks.

In 2006, she again started developing low back pain similar to the previous episode, which gradually progressed in severity, with 'weakness' in the lower limbs. This time she was referred to another neighboring country, where she underwent 'instrumented posterior L5–S1 stabilization', according to her copy of hospital records. Again, there were no images available of that hospitalization. She reported immediate relief of pain after surgery, and once again made a rapid return to normal function within the next few weeks.

In 2010, she once again started reporting low back pain with lower limb weakness. This time she traveled overseas to a third country, where, according to hospital records and available images, she underwent a diagnostic facet block. She reported immediate relief of her pain, and was then advised to undergo a third surgical procedure—exchange of her L5–S1 fusion implants with a dynamic stabilization system. Once again, she distinctly recalled having immediate pain relief after this surgery, and gradually improved her functional levels, and returned to normal life.

In May 2013, she once again reported recurrence of symptoms (back pain and weakness in both legs), which gradually increased until she required the help of another person to ambulate. An orthopedic surgeon in her home country advised her removal of her dynamic stabilization implants followed by 'fusion with cages', and referred her to us for further management.

When she presented to us, she reported severe back pain (Visual Analog Score of 8/10) and was unable to stand due to a feeling of weakness in both lower limbs. She did not report symptoms of bowel and bladder dysfunction.

On examination, she was a pleasant and articulated middle-aged lady. The general physical examination was unremarkable. Examination of the spine revealed multiple paraspinal healed surgical scars, with superficial tenderness in the L5–S1 region. Movements of spine were significantly restricted due to pain.

Neurological examination revealed hypoesthesia to fine touch in the L3, 4, and 5 dermatomes on the left side, and L4 and 5 dermatomes on the right side. Motor examination showed a mild decrease in the bulk and tone of the lower limb muscles bilaterally. Power of muscles was graded as 5 in all groups according to the MRC scale, with significant variation in direct examination of volitional power versus functional assessment. Deep tendon reflexes were sluggish in both lower limbs, and there were no pathological reflexes elicited. Both upper limbs were normal to examination.

All blood parameters were within normal limits. Plain radiographs (Fig. 1a, b) did not show any significant

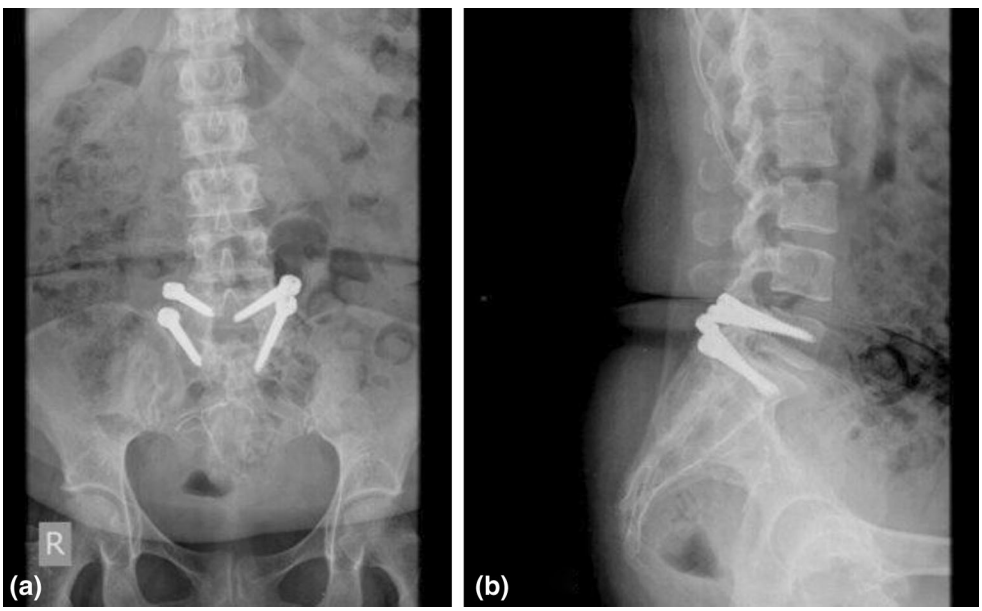

Fig. 1 Plain radiographs of lumbosacral spine views showing a dynamic stabilization implants at L5–S1 level without any significant bony abnormality

Fig. 2 MRI of lumbosacral spine, showing no significant vertebrodiscal pathology and no neural compromise

abnormalities, and magnetic resonance imaging (MRI) did not show any vertebrodiscal pathology or any spinal canal compromise (Fig. 2a, b). Nerve conduction studies showed normal compound motor action potentials (CMAP) from peroneal and tibial nerves, as recorded from the extensor digitorum brevis and abductor hallucis muscles, respectively, accompanied by a normal needle electromyography (EMG) study.

In view of her conflicting clinical findings and non-contributory imaging studies, a neurology as well as psychiatric consultation was sought. The neurology consultation confirmed that there was unlikely to be an organic weakness in her lower limbs, in view of the clinical examination and electrophysiological findings. Although the patient was reluctant to subject herself to a detailed psychiatric evaluation, she agreed to a preliminary visit, and the psychiatrists evaluation revealed prominent unresolved grief about her deceased mother, an unfulfilled psychological need to be cared for by the family and society at large, as well as symptom expression with grudge towards the medical profession for not having been able to give her immediate pain relief. She was found to be quite knowledgeable regarding the anatomy of the spine and possible surgical options, and appeared to be quite clear in her own mind about the effectiveness of the surgical procedure that had been recommended to her elsewhere, and insisted that specific surgical procedure be carried out in order for her to get relief of her symptoms, and any discussion on alternative options or the non-suitability of the surgical option in her situation was met with stiff resistance. Differences in opinion were immediately seen as oppositional and perceived by her that the doctors were not taking her illness seriously and, therefore, were not interested in helping her.

In the opinion of the psychiatrist, the patient had been exhibiting a persistent pattern of intentional and conscious symptom production to achieve a sick role without any clear evidence for an external motive. She, therefore, fulfilled the criteria for a diagnosis of a factitious disorder, according to Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV) [3]. The key features in her presentation that supported this diagnosis were:

(a) Absence of an organic etiology for the degree of pain and dysfunction as evident from the clinical evaluation and imaging findings.
(b) Possibility of intentional production of physical symptoms with a motivation to assume a sick role, as evident from the history of an unfulfilled need of being cared for with a recent loss of a close relative triggering the present pain symptoms; also a behavioral pattern of onset of sudden pain multiple times, dramatic relief with a surgical procedure which was usually demanded by her.
(c) The possibility of malingering being ruled out in view of the absence of any external incentives for such a behavior.

A differential diagnosis of dissociative disorder was also considered with a hypothesis that the symptom production was due to an unknown unconscious conflict. An attempt to offer a plausible role of the mind in pain relief was offered to the patient and the relatives but was promptly rejected and the patient refused to see the psychiatrist any further.

Over the next few days, the patient was persuaded against any further surgery, and offered a facet block instead, to which she agreed. She underwent a bilateral L5–S1 facet block under image intensifier, and reported dramatic relief of her pain within a few hours, and was walking independently the same evening. Separate conversations with the family were carried out simultaneously, explaining the possible psychiatric nature of the problem, while also trying to determine stressors in the patient's

personal life, which could have triggered her symptoms. A family member revealed there was a significantly stressful period in her life a few months prior to the onset of her first episode of back pain in 2001.

A detailed physiotherapy program was drawn up, and the patient was discharged on analgesics, anxiolytics and neural supplements, with the assurance that she would be followed up if and when her symptoms recurred. Her resistance to acknowledge the psychological origin of her symptoms was acknowledged and primary target of symptom relief with a multi-modal approach was emphasized.

Discussion

The Diagnostic and Statistical Manual of Mental Disorders IV, defines Munchausen's syndrome as "intentional production or feigning of physical or psychological signs or symptoms" [3]. The motivation for the behavior is to assume the sick role, and unlike malingering, external incentives for the behavior are absent. There may be an element of masochism, and the patient's behavior is motivated by an irresistible compulsion worsened by life events, stressors, or depressive feelings that are chronic and intractable. Specific features observed in many patients include difficulty forming stable relationships, multiple hospital admissions without specific reasons, evidence of falsified symptoms, and extensive knowledge of symptomatology and workings of the hospital [3].

Factitious disorders or Munchausen's syndrome have been reported in scientific literature with symptoms such as dermatitis artifacts or factitial dermatitis [4], symptoms feigned in proxy—as in false production of symptoms in children by parents [5], baro-reflex failure with episodes of severe hypertension and bradycardia alternating with episodes of normal and even low blood pressure and bradycardia [6] and even feigned psychiatric history and thereby fulfilling the need for hospitalization [7].

The DSM-IV casebook also reports a case of a 28-year-old female patient recovering from recent spinal fusion surgery with past history of multiple spinal surgeries and also having undergone a below-knee amputation. On psychiatric evaluation, this patient was found to have a factitious disorder with a psychological need to assume a sick role being fulfilled by multiple hospital admissions and surgical procedures [3].

Psychiatric Management of strategies for Munchausen's syndrome includes a primary goal to engage in a therapeutic process without confrontation of the "falseness" of the symptoms. The principles of Psychiatric treatment include avoiding unnecessary invasive procedures, preventing further self-harm and avoiding a confrontational stance with simultaneously ensuring a consistent approach that emphasizes consistency of care and regular follow-up [8].

The usual prognosis of patients with Munchausen's syndrome is poor as any attempt to help them has to be based on a significant trustful relationship with the therapeutic team, a seemingly difficult process as patients with Munchausen's syndrome need a sick role to be fulfilled. They either engage to the extent of becoming dependent with the therapeutic team to assume the sick role or they disengage almost immediately if their demands were not met [9].

Although this is certainly an extremely uncommon occurrence, we believe that a diagnosis of Munchausen syndrome should be considered when the following characteristics are noted in some combination:

- Dramatic history of apparently severe illnesses.
- A history of multiple hospitalizations, and possibly multiple surgical procedures often spanning multiple hospitals and cities.
- Notable vagueness or inconsistency in the details of the medical problems.
- Absent or incomplete hospital records.
- Inconsistent clinical findings not fitting the pattern of any particular diagnosis.
- Imaging studies not consistent with any particular disease.
- History of multiple surgeries for same problem with a transient improvement in symptoms followed by an apparent relapse.
- A strong desire on the part of the patient to undergo repeat surgery.

Conclusion

A history of multiple surgical interventions, often followed by dramatic improvement and then relapse, should trigger a suspicion of Munchausen syndrome, particularly in the scenario of normal imaging studies. The patient should be given the full benefit of the doubt, and all necessary investigations should be performed to rule out any structural pathology before making this diagnosis.

A psychiatric evaluation is critical, although patients can often be resistant to this line of management. Constant reassurance and confidence-building measures are needed to help the patient and the family through this difficult experience. Family members are often seriously affected emotionally when they realize that most of the previous episodes of 'illness' were mostly of a functional origin. However, the importance of educating the family on the reality of functional symptoms is a key element of the treatment process.

Finally, history taking and examination are time-honored and time-tested methods of clinical medicine, but probably this has never been truer than for conditions such as Munchausen's syndrome. At the very least, this will avoid unnecessary surgery in some patients.

Compliance with ethical standards

Conflict of interest None.

References

1. Asher R (1951) Munchausen's syndrome. Lancet 1(6650):339–341
2. Meadow R (1977) Munchausen syndrome by proxy. The hinterland of child abuse. Lancet 2(8033):343–345
3. Association AP (2000) Diagnostic and statistical manual of mental disorders: DSM-IV-TR®. American Psychiatric Pub
4. Silva NMR, Petrucci GW, Palitot EB, Azzouz MA, Azzouz Sde F (2010) Factitial dermatitis as a consequence of Munchausen syndrome. An Bras Dermatol 85(1):77–79
5. Bass C, Adshead G (2007) Fabrication and induction of illness in children: the psychopathology of abuse. Adv Psychiatr Treat 13(3):169–177
6. Tellioglu T, Oates JA, Biaggioni I (2000) Munchausen's syndrome presenting as baroreflex failure. N Engl J Med 343(8):581
7. Gelenberg AJ (1977) Munchausen's syndrome with a psychiatric presentation. Dis Nerv Syst 38(5):378–380
8. Huffman JC, Stern TA (2003) The diagnosis and treatment of Munchausen's syndrome. Gen Hosp Psychiatry 25(5):358–363
9. Lad SP, Jobe KW, Polley J, Byrne RW (2004) Munchausen's syndrome in neurosurgery: report of two cases and review of the literature. Neurosurgery 55(6):1436