

The second victim – supporting JMOs through medical errors

Dr Sarah Newman, Assistant Director, Doctors' Health Advisory Service WA,
General Practice, MDA National Member

The term 'second victim', coined by Wu in 2000*, encapsulates the impact of medical error on clinicians. Despite public perception, and what hard-line medical culture would have us believe, medical error is inevitable as we are all fallibly human.

We accept the patient as the first victim, and our critical incident review process naturally focuses on their outcomes. But the health professionals who feel responsible can often be neglected.

Although linear root cause analyses attempt to appreciate the multifactorial reasons behind incidents where the individual is only one 'hole' in the 'Swiss Cheese' model, the emotional impact of errors may be overlooked. Doctors who are second victims may experience psychological distress, burnout, post-traumatic stress, risk-averse practice, and maladaptive behaviours including drug and alcohol abuse, leaving the profession and, in the worst case, suicide.

Junior doctors and trainees (JMOs) are particularly vulnerable to the effects of medical errors. Inexperience, high workload, increased fatigue, burnout, and feelings of inadequate clinical supervision are important contributors. Senior guidance is critical in shifting the perspective from trauma to growth. Medical errors can be re-envisioned as formative learning experiences – for the second victim, their colleagues and the organisation.

Medical leadership sets the culture for how medical errors are viewed, processed and managed.

The work environment must be a safe place to discuss mistakes. Water-cooler gossip is harmful and should be actively discouraged. JMOs require support when providing open disclosure to the patient, and it helps to understand that admission and apology do not imply legal liability. They should be encouraged to have early discussions with their medical defence organisation to address medico-legal consequences.

1. Assess any acute needs.

Second victims are often distressed immediately after the incident comes to light, needing a safe space for a sounding board and psychological first aid, while steering away from clinical scrutiny. The JMO may need a break or to go home. Disclosing one's own inevitable experience of medical errors normalises and validates their experience.

2. Facilitate reflection to enable clinical growth.

Have regular check-ins with the JMO and make sure they know the existing hospital and external support available for further assistance. In times of crisis and distress, the [Australasian Doctors' Health Network](#) directs viewers or callers to the state based health organisations which provide [24/7 advice lines](#) manned by medical practitioners experienced in doctors' health. These organisations can support doctors acutely, anonymously, and with confidentiality.

Systemic change is needed when approaching medical error. When the second victim is blamed, the healthcare organisation and patients suffer. Consider what simple interventions in everyday practices could prevent future second victims, and integrate early and ongoing support for second victims into the workplace.

Open discussion of medical errors during college education, peer groups and supervision will help dispel the stigma of mistakes. At the end of the day, we are all only human. A human response of empathetic support helps JMOs become better clinicians, moving forward from 'victim' to formulating meaning and experience after medical error.

*Reference available on request: marketing@mdanational.com.au

Post-operative intestinal dysfunction including adhesive intestinal obstruction or paralytic intestinal obstruction is common due to widespread surgical wound for abdominal cocoon. Therefore, early post-operative physical rehabilitation and feeding are highly recommended.⁹

In conclusion, abdominal cocoon is a rare disease with unknown aetiology. Intestinal obstruction or abdominal mass are the primary clinical presentations. It is a challenge to make a correct preoperative diagnosis of this disease while surgery is the primary treatment for most patients. Further investigation is warranted in future to understand its aetiopathogenesis to prevent it from occurring and to optimize its management.

References

1. Deeb LS, Mourad F, El-Zein Y, Uthman SM. Abdominal cocoon in a man: preoperative diagnosis and literature review. *Clin. Gastroenterol.* 1998; **26**: 148–50.
2. Foo KT, Ng KC, Rauff A, Foong WC, Sinniah R. Unusual small intestinal obstruction in adolescent girls: the abdominal cocoon. *Br. J. Surg.* 1978; **65**: 427–30.
3. Mandavdhare HS, Kumar A, Sharma V, Rana SS. Abdominal cocoon: an enigmatic entity. *Trop. Gastroenterol.* 2016; **37**: 156–67.
4. Sovatzidis A, Nikolaidou E, Katsourakis A, Chatzis I, Noussios G. Abdominal cocoon syndrome: two cases of an anatomical abnormality. *Case Rep. Surg.* 2019; **3**: 1–4.
5. Jovani M, Baticci F, Bonifacio C, Omodei PD, Malesci A. Abdominal cocoon or idiopathic encapsulating peritoneal sclerosis: magnetic resonance imaging. *Dig. Liver Dis.* 2014; **46**: 192–3.
6. Machado NO. Sclerosing encapsulating peritonitis: review. *Sultan Qaboos Univ. Med. J.* 2016; **16**: 142–51.
7. Wang YZ, King H, Diebold A. Cocoon formation in patients with mid-gut neuroendocrine tumors: a rare and unrecognized final pathway. *Pancreas* 2013; **42**: 944–8.
8. Xu P, Chen LH, Li YM. Idiopathic sclerosing encapsulating peritonitis (or abdominal cocoon): a report of 5 cases. *World J. Gastroenterol.* 2007; **13**: 3649–51.
9. Xia J, Xie W, Chen L, Liu D. Abdominal cocoon with early postoperative small bowel obstruction. A case report and review of literature in China. *Medicine* 2018; **97**: 1–5.

Xiufeng Chen,* MD 

Yujie Zou,† MD

Lihui Chen,* MD

Ke Wei,* MD

Hao Sun,* MD

Wei Li,* MD

*Gastrointestinal Cancer Center, Chongqing University Cancer Hospital, Chongqing, China and †Emergency Department, Chongqing University Center Hospital, Chongqing, China

doi: 10.1111/ans.15716

Retroperitoneal schwannoma masquerading as an ovarian cyst

A 45-year-old Caucasian premenopausal woman with no significant past medical history was referred by her primary care physician with a 10-month history of intermittent pelvic pain and an ultrasound and computed tomography (CT) reporting a large left adnexal mass (Fig. 1). She had an unremarkable gynaecological history with no history of ovarian cysts. She was Gravida 1 with a previous

instrumental termination of pregnancy. Pap smears were up to date with no previous concerns and she denied any previous sexually transmitted infections. There were no previous abdominal surgeries.

Physical examination recorded vital signs within normal limits, and an unremarkable physical examination apart from mild tenderness on deep palpation of the left lower quadrant. There was a



Fig. 1. Computed tomography and pelvic ultrasound showing a large cystic mass 'arising' from the left adnexa.

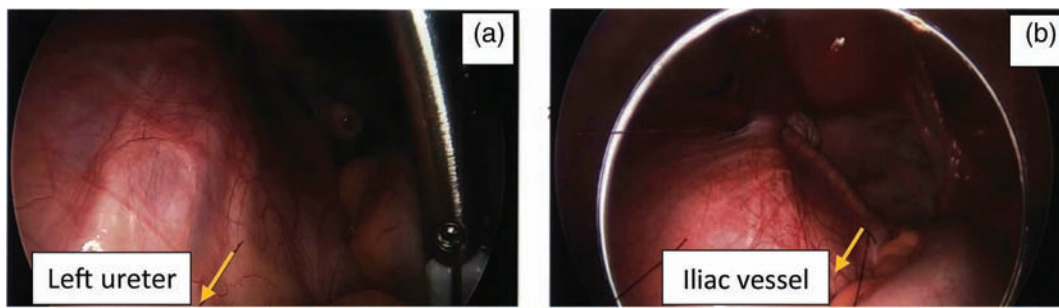


Fig. 2. Intraoperative images showing large pelvic mass covered by peritoneum, displacing the left ureter (a) and the left iliac vessels (b).

palpable mass in her left lower quadrant confirmed through per vaginal examination, where a left adnexal mass could be balloted on bimanual examination.

Laboratory studies including complete blood count, basic metabolic panel, liver function tests and tumour markers including Cancer Antigen 125 (CA 125), Alpha-Fetoprotein (AFP) and beta-Human Chorionic Gonadotropin (b-HCG) were all within normal range. With the pelvic ultrasound and CT indicating a 10-cm left adnexal mass (Fig. 1) thought to be arising from the left ovary, she was booked and consented for a laparoscopic cystectomy to alleviate her symptoms, obtain histological diagnosis as well as to mitigate her risks of torsion.

The initial laparoscopic ovarian cystectomy was aborted after intraoperative findings confirmed its location as a retroperitoneal cystic mass as opposed to an ovarian lesion (Fig. 2). Subsequent magnetic resonance imaging (MRI) showed a homogeneous cystic

lesion in the retroperitoneal space measuring $11.9 \times 8 \times 8.1$ cm, with no internal complexity nor any wall thickening (Fig. 3).

Nevertheless, brief consultation was undertaken with the local sarcoma unit who advised surgical resection without the need for any biopsy prior given the lack of suspicious features. She underwent radical resection of the mass via extraperitoneal approach. The cyst was removed *in toto* together with its lining, and pathology was consistent with benign schwannoma.

This case showcases how retroperitoneal lesions in the pelvis can be difficult to distinguish from more commonly occurring ovarian cysts. The difficulty in teasing apart intra- versus extra-peritoneal lesions within the pelvis will always represent a challenge for the clinician and is a lesson to be noted.

Schwannomas are mesenchymal tumours that arise from Schwann cells of peripheral nerve sheath. Most commonly benign, they are usually found in the extremities – the head, neck and limbs

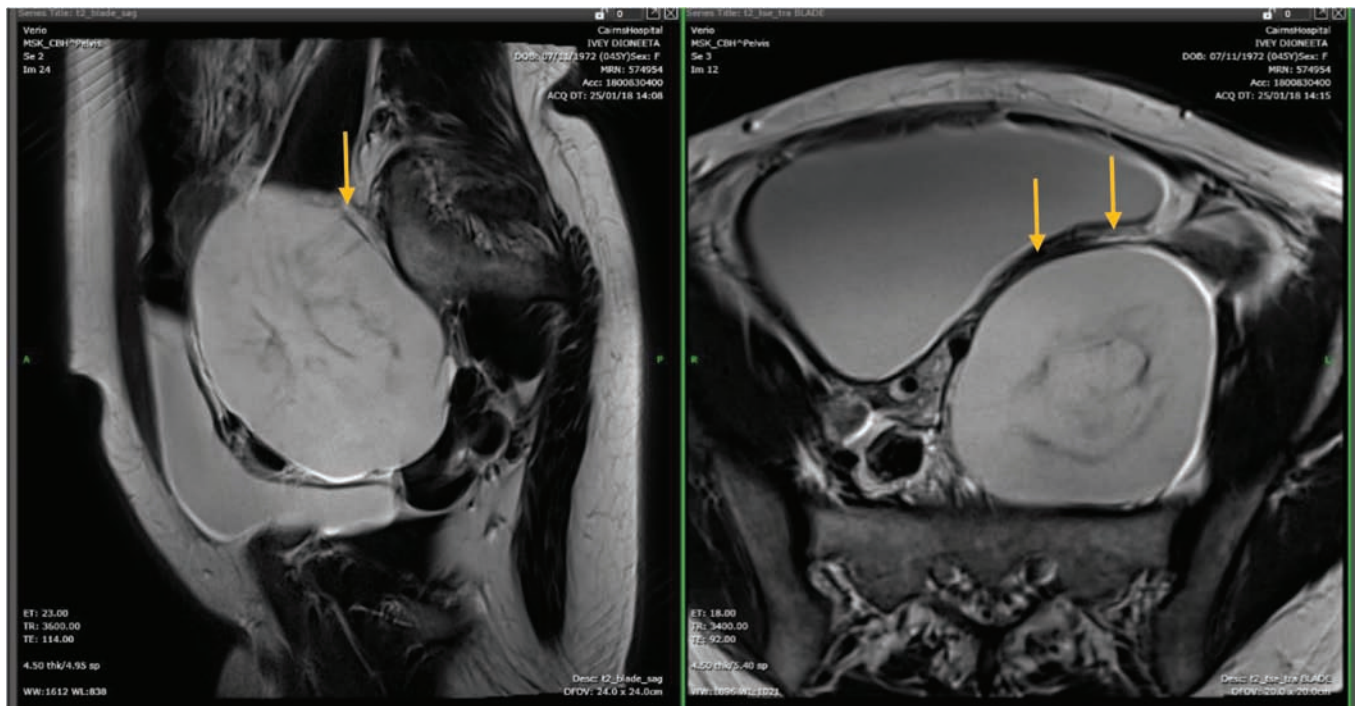


Fig. 3. Magnetic resonance T2-weighted images showing the mildest delineation making this a retroperitoneal lesion.

with only less than 3% of schwannomas reported to be in the retroperitoneal space.^{1,2} To our knowledge, this is the first case of retroperitoneal schwannoma reported as a cause of pelvic pain. Therefore, it would be beneficial to surgeons and gynaecologists to include this as a possible cause of pelvic pain in an otherwise well lady.

Retroperitoneal schwannomas are mostly found incidentally given their asymptomatic nature. Given the non-restrictive nature of the retroperitoneum, they often grow to a large size before compressive symptoms prompt detection. These include non-specific abdominal pain or distension. When investigated, CT and MRI findings show benign-appearing features such as a well-demarcated, homogeneous, spherical, solitary mass, but none are specific.¹

Differential diagnoses include paraganglioma, neurofibroma, ganglioneuroma, tumours of mesodermal origin and retroperitoneal malignancies. Therefore, despite the absence of suspicious features on MRI, consultation with the local sarcoma unit was made for a second opinion as we wanted to consider the rare possibility of a solid sarcomatous lesion exhibiting bright T2 signal and mimicking a cyst on MRI.³

In rarer circumstances, schwannomas have also been associated with genetic syndromes such as schwannomatosis or neurofibromatosis.^{4,5} Multiplicity as opposed to single tumours are of the hallmark, with debilitating symptoms such as chronic pain, weakness, numbness or headaches.⁴

Treatment wise, surgical resection is the recommended treatment for retroperitoneal schwannomas, both to resolve the compressive symptoms as well as to provide a definite histological diagnosis after histopathological and immunohistochemical staining analyses.² Characteristic histopathological and immunohistochemical features include Antoni areas, S-100 and CD-34 staining.⁶ Given the usually benign nature of disease, complete

surgical resection would also indicate cure with recurrence rates reported to be very low.⁷

References

1. Fass G, Hossey D, Nyst M *et al.* Benign retroperitoneal schwannoma presenting as colitis: a case report. *World J. Gastroenterol.* 2007; **13**: 5521–4.
2. Holbrook C, Saleem NJ. Retroperitoneal schwannoma: an unusual cause of abdominal distention. *BMJ Case Rep.* 2017; **2017**: bcr-2017-220221.
3. Bermejo A, De Bustamante TD, Martinez A, Carrera R, Zabía E, Manjón PJ. MR imaging in the evaluation of cystic-appearing soft-tissue masses of the extremities. *Radiographics* 2013; **33**: 833–55.
4. MacCollin M, Chiocca E, Evans D *et al.* Diagnostic criteria for schwannomatosis. *Neurology* 2005; **64**: 1838–45.
5. Kresak JL, Walsh MJ. Neurofibromatosis: a review of NF1, NF2, and schwannomatosis. *J. Pediatr. Genet.* 2016; **5**: 98–104.
6. Harder A, Wesemann M, Hagel C *et al.* Hybrid neurofibroma/schwannoma is overrepresented among schwannomatosis and neurofibromatosis patients. *Am. J. Surg. Pathol.* 2012; **36**: 702–9.
7. Rajkumar J, Ganesh D, Anirudh J, Akbar S, Kishore CJ. Laparoscopic excision of retroperitoneal schwannoma. *J. Clin. Diagn. Res.* 2015; **9**: PD05–7.

Kay Tai Choy, MBBS 

Kaushik Kumar, MBBS

Dinesh Ratnapala, MBBS, FRACS

Department of Surgery, Cairns Hospital, Cairns, Queensland, Australia

doi: 10.1111/ans.15717