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Cognitive Conflict – How to Deal with Sudden, Unsuspected Shifts of the Treatment Paradigm

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Abstract

Ectopic pregnancy occurs when an early conceptus implants abnormally and develops outside the endometrial cavity of the uterus. Diagnosis is critical and is based on history, clinical examination and the findings of diagnostic imaging such as transvaginal ultrasound (TVUSS). In recent years, the latter has become a gold standard of non-invasive, pre-operative investigation, so much so, that it's results are rarely argued. We present a case of a 26-year-old indigenous woman who presented to emergency department with pelvic pain and recent onset vaginal bleeding in the setting of a positive pregnancy test. Transvaginal USS identified significant free fluid in the pelvis associated with a right adnexal mass and empty uterus. A ruptured ectopic pregnancy was considered most likely diagnosis and the patient was taken to theatre for emergency laparoscopy. Paradoxically, the procedure found no signs of intra-abdominal bleeding. Instead, a large, 20cm, right sided ovarian cyst was seen filling the pouch of Douglas (POD) and extending superiorly out of the pelvis along the posterior abdominal wall. This was subsequently found to be an unruptured Dermoid cyst. The case demonstrates the challenge of sudden cognitive conflict and the pressure to shift intended management strategies when the findings of clinical intervention do not match the expectations upon which they were originally intended.

Keywords: Ectopic pregnancy; Dermoid cyst; Transvaginal USS; Pelvic free fluid; Paradigms; Diagnostic dilemmas

Background

Transvaginal ultrasound (TVUSS) is a sentinel and much sought-after soothsayer of diagnostic decision making. It can be used with high fidelity to image pelvic anatomy and in particular, demonstrate variations of form including the presence of significant free intra-abdominal fluid [1,2]. In the setting of pain and early pregnancy where a clearly defined, intra-uterine gestational sac has not been identified, the latter is highly suspicious of haemorrhage associated with a ruptured ectopic pregnancy [3,4]. This is a critical and potentially life-threatening event that almost always requires emergency surgical intervention. This case report presents an unusual clinical scenario where this was believed to be so but paradoxically, was found instead to be evidence of chronic adnexal pathology coexistent with an early, resolving miscarriage.

Case Report

A 26-year-old lady presented acutely to the emergency department of a rural general hospital with recent onset pelvic pain. On arrival she was noted to have moderate discomfort associated with vaginal bleeding. Her cardiovascular signs were stable and her blood work up unremarkable apart from a positive b-HCG. The initial level was 2220. The patient had not been aware that she was pregnant. A TVUSS was arranged urgently and demonstrated a large, complex hypoechoic area in the right adnexa with internal echoes and potential sac like structures. Significantly, there was a large volume of free fluid estimated to be at least 1 litre with no evidence of an intra-uterine gestational sac. A diagnosis of hemoperitoneum and likely ruptured ectopic pregnancy was reported.

The patient's admission was complicated by social demographics. She was an indigenous woman from Malaysia, working in remote western Victoria as a seasonal fruit-picker. She spoke no English and had no support persons present. Although communication was improvised using phone interpreter services, it remained staccato and the patient could not be reassured effectively. She was therefore reluctant to consent to operative intervention when proposed by the treating medical team. Though

hesitant to defer from their plan, the team did so with some small comfort that the patient's clinical findings remained stable suggesting sustained tolerance to the presumed findings with no immediate or incipient evidence of likely decompensation. This was however taken with caution given the expected volume of blood loss. Review of the initial radiology report followed, including face to face discussion with the sonographer, which confirmed the suspicion of ruptured ectopic pregnancy and so, in the setting of proposed expectant care, the patient was managed vigilantly with IV access, 2-unit crossmatch and arrangements to remain fasted with close nursing observation and repeat FBC overnight.

The following morning, she had a moderate tachycardia of 105bpm. Her blood pressure was normal at 116/70mmHg, with no postural drop and she was well perfused with warm peripheries and normal oxygen saturation on room air. Her blood workup demonstrated a small drop of hemoglobin concentration from 127g/dl to 114g/dl which was thought to be consistent with haemodilution secondary to IV fluid hydration. Her abdominal discomfort persisted but was not distressing though associated with some mild involuntary guarding on palpation. There was slight, ongoing vaginal blood loss and repeat b-HCG showed a fall of nearly 700 units. Despite no significant signs of deterioration, the clinical team again advised for operative evaluation. This was communicated carefully to the patient, but this time with the help of a young student who was fluent in the patient's native language (Mandarin). With this more intuitive, face-to-face conversation, the team were able to mitigate the patient's apprehension and together agree to proceed with the recommended management plan. Accordingly, the patient was listed for emergency surgery to proceed as soon as possible.

In theatre, vaginal speculum examination visualized a small trickle of blood from the external cervical os. Digital palpation found diffuse fullness in the posterior fornix from which the uterus was not separately palpable. The cervix was closed. A direct, umbilical port entry laparoscopy was performed which showed immediately and disconcertingly, no evidence of hemoperitoneum. Once reconciled to this, further examination confirmed that the uterus and tubes were also normal. Coexistent with this however, they discovered a large, right sided ovarian cyst filling the Pouch of Douglas and extending across the midline up along the posterior abdominal wall. There was no evidence of rupture or torsion. Given the unprecedented nature of the findings, the cyst was left intact pending further discussion with the patient. Noting the fall in b-HCG, a dilation and curettage (D&C) was however performed at the end of the procedure and sent for histopathology. No intra-operative complications were reported.

Post operatively, the findings were shared with the radiology department. The initial films were again reviewed by senior staff. It was noted that a scan of the upper abdomen had not been performed. This was because the volume of presumed intra-abdominal bleeding had been such that it was considered unnecessary. Had it been done however; the question was raised of whether it would have found free fluid under the diaphragm or in the peri-nephric space and if not, would that have changed our management? [5]. We conceded that it would not have, although it would perhaps have given some leverage to consider other possibilities of diagnosis which may have better prepared us for the eventual findings. With further discussion, CT of chest, abdomen and pelvis were arranged. These showed interconnected, fat-containing cystic masses with calcified tooth-like structures and other, more solid material, approximately 20cm in size, consistent with a large ovarian dermoid cyst. No evidence of metastasis, lymphadenopathy or bowel and ureteric obstruction were noted. Histopathology of currettings reported secretory endometrium with Arias Stella reaction. Chorionic villi were not detected. Serial b-HCGs showed a continued down trend to 188, 5 days later and eventually, to non-pregnant levels post discharge. Additional bloods for tumour markers Ca 125 and Ca 19.9 which were all normal at 87H U/ml (<35), and 131H U/ml (<35) respectively.

Discussion

The suspicion of a ruptured, ectopic pregnancy is almost always, a call for immediate surgical intervention [3,4]. In this case, the evidence appeared resolute. There were symptoms of pelvic pain, vaginal bleeding, a raised serum hCG and most significantly, a TVUSS demonstrating high likelihood of free pelvic fluid consistent with intra-abdominal bleed. In normal settings, this combination of findings would be sufficient to advocate immediate, surgical treatment. In this case however, we were not able to do so because the patient was reluctant to proceed.

Acquiescing to this required re-consideration of the presenting findings. Whilst the history and radiological findings were seemingly conclusive, the clinical findings were incongruent with the severity of harm predicted. Whilst we could not reconcile this variance, it gave us some reassurance that initial conservative care was not an altogether inappropriate choice. In fairness and in accord with the patient's reluctance to comply, it was our only choice but had things been otherwise and the patient's condition more fragile, we would no doubt have argued more strongly for active management.

An important reminder from this case is to highlight the absolute importance of informed consent and of the collaborative decision making and shared communication that makes this possible. Whilst we might know what we think is best, we can do nothing if we cannot bring our patient to that same understanding. This is particularly important when patients are estranged or isolated socially by language and other cultural barriers. In this case, our patient was unable to understand English, she was young and without any immediate social support and she was faced with a diagnosis and procedure that for her, felt overwhelmingly frightening. To have moved directly to theatre, whilst it may have

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seemed appropriate to us, was not an option. It prompts us to remember that this may be equally true for other patients who may feel forced to follow medical dictates or feel themselves too disempowered to argue otherwise and are thus exposed to risks that should not occur, or, would be better left to occur at a time when the patient is more able to face them. These include not only the risk of surgical intervention but also the psychological apprehensions and regrets that a patient may feel afterwards. We note however that such negotiations or circumventions for impasse are not themselves without risk. To delay too long may permit catastrophic deterioration and thus a greater degree of complication or harm that might otherwise have been avoided. This calls for balance. It pleads against the fear of fault or blame which otherwise dictates so much of what we do. It demands communication, a shared conciliation with the patient upon whom these risks occur, not only for the pathology they harbour, but for the processes of intervention requested of them [6-11]. Thankfully, we had the liberty to delay our desire for immediate action and fortuitously, to find ourselves with an opportunity to allow genuine, empathic communication and thus develop the much-needed rapport to safely proceed with our patient fully complicit with the decisions intended.

This quandary of this case highlights a dilemma faced by remote health care in regional north-west Victoria where patient populations are disproportionately weighted by non-Australian residents living in situations of social isolation. Services to bridge these gaps, such as face-to-face language interpretation and support are often limited, and the capability structure of the hospital service may be such that emergency care for potentially life-threatening situations is highly regulated to ensure best opportunistic practice. All of this amounts to a proclivity to treat patients as conditions and to compartmentalize them into a service model that best aligns with our ability to treat. These limitations challenge our courage to step outside standard guidelines for fear of failure and regrettably, for the shame of fingers pointed critically thereafter – usually by metropolitan or academic centres where such risks are so much less evident.

This case also presents the paradox that can arise when clinical findings confound the anticipation of diagnostic investigation. In our case, we assumed that a massive intra-abdominal bleed had occurred. We also knew that the patient was pregnant and although dates were uncertain, the risk of a ruptured ectopic seemed inevitable. Whilst we were cognizant of the paradox of clinical findings, and in particular the sustained stability of cardiovascular function, we felt compelled to commit to immediate surgical intervention. That we were not able to so, forced us to re-think the entire presentation and develop a broader perspective of aetiology. Whilst this did not negate our desire for surgical management, and admittedly, did not include the eventual diagnosis, it did provide some latitude to support a less active approach to immediate care. When we did get to theatre, we expected to find a pelvis full of blood. Instead, we found a large, unruptured ovarian cyst. This initially threw us into turmoil. Where was all the blood? How could we reconcile what we'd found with what we expected to see? What do we do now? All of these questions required recalibration of strategy, adjusting the known findings to a new paradigm to ensure that subsequent action remained appropriate and safe and importantly, in line with the patient's expectations of consent. We examined the cyst carefully. We noted that it was perfused, and that there was no evidence of rupture. Given that the findings were not complicated, though we could not definitively exclude a malignancy or compressional injury obstructing other structures, we resolved to take no further action. We surmised that the falling hCG was consistent with a failing pregnancy and so performed curettage at the end of the procedure. Immediately after surgery, we had face to face discussion with the radiology team. Re-examination of the initial films conceded that whilst an alternative diagnosis may have been possible at the time of initial examination, it would not have negated the urgency for surgical care. This meeting however, allowed us to plan further care and in so doing, expedite appropriate ancillary scans including CT and tumour markers. These subsequently confirmed the diagnosis of a benign Dermoid cyst.

This process of shared communication is essential in modern medicine where multidisciplinary teams, though essential to collaborative care, are often fragmented geographically within the hospital environment leading to discontinuity of process and often, a failure to communicate the outcome of treatment decisions. To share openly and without blame, allows opportunity to learn and deepen clinical experience which ultimately, allows us to become better clinicians, particularly in the setting of unusual or complicated clinical presentations. For the patient, it allows us to develop an integrated understanding of presenting symptoms and signs, of underlying pathology and ultimately, a shared strategy for safe aftercare empowering choices that are timely and personally resonant [12-14].

Given the eventual diagnosis, a rare and certainly more abstract explanation for the raised serum hCG noted in this case, was that it was a tumour marker for the cyst and not, as was surmised, a sign of early pregnancy [15]. Whilst this has been reported in the literature [16], it seems unlikely given that the serum levels were dropping spontaneously and subsequent endometrial histology demonstrated progesterone effect associated most likely, with early gestation. We speculate that the patient was indeed pregnant and suffered from either a spontaneous miscarriage or, albeit less likely, an unruptured ectopic pregnancy that resolved spontaneously.

Conclusion

We present this case to illustrate the perplexities that arise when faced with a clinical outcome not in keeping with investigative forebodings. It asks us how to adapt, how to provide safe care

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that does not exceed patient consent and understanding and yet still ensures best possible outcome. It highlights the challenge of informed consent and ensuring that our actions remain aligned to the patient's understanding and permission for treatment. Our case demonstrates how critical this is in a multicultural setting where those needs may be more difficult to comprehend and the support they require, more difficult to provide in a hospital service isolated from tertiary backup. Finally, our case affirms the importance of clinical cognizance, and the broad perspective of clinical acumen that allows critical judgement to embrace all aspects of observational and investigative findings. It highlights the innovations of ultrasound imaging, particularly of Fast Scan techniques to confirm or deny, the presence of intra-abdominal bleeding. Moreover, it acknowledges teamwork, the importance of immediate communication and the power of a constructive culture where learning and the outcomes of action can be shared transparently, without prejudice or blame to evolve and improve the performance of us all individually and collectively which ultimately means, safer care for the patients we look after, no matter who they are, where they come from, and with whatever it is that they present, particularly when it is something that may very well confound us all.

References

1. CI Duncan, JJ Reynolds-Wright, ST Cameron Utility of a routine ultrasound for detection of ectopic pregnancies among women requesting abortion: a retrospective review. BMJ Sexual & Reproductive Health 48(1).
2. Francesca Iacobellis, Francesco Verde, Dario Grimaldi, Vittorio Sabatino, Chiara Rinaldo, et al. Academic Editor: Andor W JM Glaudemans. Role of Ultrasound in the Assessment and Differential Diagnosis of Pelvic Pain in Pregnancy. 12(3): 640.
3. Rodgers SK, Chang C, DeBardeleben JT, Horrow MM (2015) Normal and Abnormal US Findings in Early First-Trimester Pregnancy: Review of the Society of Radiologists in Ultrasound 2012 Consensus Panel Recommendations. Radiographics 35(7): 2135-2148.
4. McAllister, B Lang, A Flynn, ZF Meisel, Abernathy A, et al. (2022) Pregnant and bleeding: A model to assess factors associated with the need for emergency care in early pregnancy. Am J Emerg Med 53: 94-98.
5. A RM Al Hadi, ZA Alshehri, AD Alhindi, AY Alshubruqi, SAM AlMansour, et al. (2020) Evaluation of the Role of Ultrasound Use in the Emergency Department.
6. E Fox, AJ Tarzian, M Danis, CC Duke (2022) Ethics consultation in US hospitals: Opinions of ethics practitioners. Am J Bioeth 22(4): 19-30.
7. MM Nataliansyah, X Zhu, T Vaughn, K Mueller (2022) Beyond patient care: a qualitative study of rural hospitals' role in improving community health. BMJ Open 12(3): e057450.
8. Queensland Health Rural maternity taskforce report. Brisbane: Queensland Health, 2019.
9. Hung P, Kozhimannil KB, Casey MM, Moscovice IS (2016) Why are obstetric units in rural hospitals closing their doors? Health Serv Res 51(4): 1546-1560.
10. Humber N, Frecker T (2008) Delivery models of rural surgical services in British Columbia (1996-2005): are general practitioner-surgeons still part of the picture? Can J Surg 51: 173-178.
11. Barr H, Freeth D, Hammick M, Koppel I, Reeves S (2006) The evidence base and recommendations for Interprofessional education in Health and Social Care. J Interprof Care 20(1): 75-78.
12. Mohanna K, Chambers R, Wall D, et al. (2003) Teaching made easy: a manual for health professionals. (2nd edn), Abingdon, Oxfordshire: Radcliffe Medical Press.
13. Freeth D, Reeves S, Koppel I, Hammick M, Barr H (2005) Evaluating interprofessional education: a self help guide, 2005.
14. J Troup, B Lever Taylor, L Sheridan Rains, E Broeckelmann, J Russell, et al. (2022) Clinician perspectives on what constitutes good practice in community services for people with Complex Emotional Needs: A qualitative thematic meta -synthesis. PLoS One 17(5): e0267787.
15. Tagrid Jar-Allah, Helena Hognert, Laura Köcher, Linus Berggren, Christian Fiala, et al. (2022) Detection of ectopic pregnancy and serum beta hCG levels in women undergoing very early medical abortion: a retrospective cohort study. Eur J Contracept Reprod Health Care 27(3): 240-246.
16. Kah Teik Chew, Muhammad Azrai Abu, Mohd Faizal Ahmad, Nur Azurah Abdul Ghani (2018) Bilateral Mature Cystic Teratoma Masquerading as an Ectopic Pregnancy: A Case Report and Review of the Literature. Journal of Gynecologic Surgery 34(5): 252-254.

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