New Horizons in Clinical Case Reports 2 (2017) 20–34

Contents lists available at ScienceDirect

New Horizons in Clinical Case Reports

journal homepage: www.elsevier.com/locate/nhccr

Abstracts: European Congress of Surgical Case Reports (EUSCR-2017), 14-15 July 2017, Vienna, Austria

Aamir Shahzad [a,b,1,2,*]

[a] *Department of Neurology, University of Colorado School of Medicine, USA*
[b] *European Society for Translational Medicine (EUSTM), Austria*

Oral Presentations

Successful use of deep hypothermic circulatory arrest (DHCA) during mid-term pregnancy

Zachary Baker*, Scott Lick

University of Arizona, Tucson, Arizona, USA

Introduction: Ascending aortic dissection (Type A) often requires deep hypothermic circulatory arrest (DHCA) for proper repair. It involves the use of cardiopulmonary bypass to achieve whole body cooling to a temperature of 18 degrees Celsius prior to the cessation of all circulation. This circulatory arrest then allows for repair of the aortic arch and/or cerebral vessels without cross-clamp. This technique is well described and has become standard practice in the treatment of Type A dissection. The use of DHCA during pregnancy, however, has seldom been described.
Case description: A 31-year-old female at 21 weeks gestation presented acutely to the emergency department with a Type A aortic dissection. She was taken emergently to the operating room and cardiopulmonary bypass was initiated via femoral arterial and central venous cannulation. Aortic repair was accomplished during a 25 minute period of DHCA. Destruction of her aortic root by the dissection included the right coronary ostium and required composite tissue valve and conduit replacement (Bio–Bentall) with right coronary saphenous vein bypass. Fetal ultrasound imaging obtained preoperatively and postoperatively demonstrated no changes in fetal heart tones or obvious evidence of fetal injury. She was subsequently discharged on postoperative day 4. Evaluation by obstetrics 8 weeks postoperatively (29 weeks gestation) revealed normal fetal growth. 4 months post operatively she delivered a full-term infant without any noticeable deficits.
Conclusions: The use of DHCA for type A aortic dissection is standard practice but its use during pregnancy has rarely been described. This case illustrates the use of DHCA during midterm pregnancy that resulted in an excellent outcome.
Take home message: DHCA can successfully be used during midterm pregnancy.

http://dx.doi.org/10.1016/j.nhccr.2017.10.002

Survival of the Unfittest: A case of End-Stage Heart Failure and advanced esophageal cancer managed successfully with an implantable Left Ventricular Assist Device (LVAD) and aggressive chemoradiation therapy

Louis Samuels [1,2,*], Elena Casanova-Ghosh [2], Steve Domsky [2], Christopher Droogan [2], Zonera Ali [2]

[1] *Thomas Jefferson University, Philadelphia, PA, USA*
[2] *Lankenau Medical Center, Wynnewood, PA, USA*

Introduction: End-stage heart failure and advanced esophageal cancer carry an extremely poor prognosis with a disabling quality of life (QOL). Individually, the 3-year survival is poor; simultaneously, it is unreported, but predictably dismal. LVAD implantation as Destination Therapy (DT) for non-transplant candidates has proven to prolong survival with an improved QOL. However, some DT-LVAD patients have survived their cardiovascular condition only to discover that they have serious malignancies. Treatment of these cancers in an LVAD patient is challenging. Anecdotal reports are beginning to appear in the literature as the DT-LVAD patient population continues to grow.
Case description: A 72 year-old man with end-stage heart failure was implanted with a Heartmate II® LVAD as Destination Therapy. The surgery was uneventful and he was discharged on postoperative day 16. Seven months later, he developed melena and was found to have an ulcerated mass at the gastroesophageal (GE) junction that was pathologically adenocarcinoma. CT/PET scanning and upper endoscopic sonography staged the disease at III (T3N1M0). Subsequent imaging showed a lytic L4 lesion that was biopsy proven metastatic disease. Due to the presence of the LVAD, the patient was not a surgical candidate for resection. Treatment

E-mail address: aamir.shahzad@eutranslationalmedicine.org
[1] Please note that the selected abstracts were chosen by the editor and this publication does not include all abstracts presented at the congress.
[2] Corresponding author at: European Society for Translational Medicine (EUSTM), Austria.

consisted of chemoradiation therapy in the following manner: Two cycles of Paclitaxel (Taxol®)-Carboplatin followed by Paclitaxel-Carboplatin with radiation therapy (XRT) to the GE junction for six weeks followed by maintenance Folinic Acid-Oxaliplatin-Fluorouracil (FOLFOX 6) every two weeks. Drug dosing was modified in accordance with complete blood count (CBC) results. Serial PET scans were performed to assess efficacy, showing a range of complete absence of abnormal ^{18}F-FDG uptake to occasional uptakes in various locations with mild to moderately elevated maximal SUV units. At present, the patient is alive with a good QOL approximately 3.5 years from LVAD implantation and 3 years from esophageal cancer diagnosis.

Results and Conclusions: Multi-disciplinary therapies were instituted to treat two lethal conditions: end-stage heart failure and advanced esophageal cancer. The combination of medical therapy with chemotherapy, interventional therapy with radiation, and surgical therapy with an LVAD proved efficacious in this otherwise fatal case. As more patients with end-stage heart failure are implanted with LVADs - particularly for DT - the likelihood of non-cardiac conditions will undoubtedly appear cancer among them. The challenge will be to determine how to best approach these conditions. This case illustrates the power of a collaborative approach in the management of this complex problem.

Take home message: The use of the implantable LVAD has enabled patients with end-stage heart failure to live longer and with an improved QOL. As a result of not dying from heart failure, some patients will experience serious non-cardiac conditions including cancer. With the growing number of DT-LVAD patients worldwide, it will be imperative for healthcare providers to address the treatment of these maladies utilizing a multi-specialty approach.

http://dx.doi.org/10.1016/j.nhccr.2017.10.003

A rare cause of small bowel obstruction which should always be considered

William Evans*, Anthony Rate

Royal Oldham Hospital, Greater Manchester, UK

Introduction: Appendicitis has been known to cause acute small bowel obstruction through mechanical and physiological interactions with the ileum. Here a 52 year old male, who, following 3 days of lower abdominal pain, bowels not having opened and vomiting was found on computed tomography (CT) scan to have a mechanical small bowel obstruction. This was operated on via lower midline laparotomy and adhesiolysis. An inflamed appendix was found to have wrapped itself around the terminal ileum causing a focal stricture. After appendectomy the patient was discharged 6 days later and made a full recovery.

Case description: A 52 year old man with a past history of GORD, hypertension and peripheral vascular disease (with aorto-bifemoral bypass) was admitted onto our Surgical Triage Unit (STU) at 22:10 on a Thursday evening. He complained of a 3 day history of illness consisting of cramping lower abdominal pain, bowels not having opened and recurrent bilious vomiting.

Results and Conclusions: An urgent CT scan reported “High grade small bowel obstruction, with change of calibre in the distal ileum. This may be secondary to adhesions (previous bilateral femoral bypass) or internal hernia. Incidentally, the appendix also looks inflamed. No perforation or intra-abdominal collections.” At laparotomy, the appendix was inflamed with free pus in the peritoneal cavity and dilated small bowel loops in the vicinity. On closer inspection it could be seen that the inflamed appendix had wrapped itself around the terminal ileum stenosing its lumen and causing the small bowel obstruction.

Take home message:

- Always consider a concurrent appendicitis in cases of small bowel obstruction
- Do not exclude an appendicitis in cases of left sided abdominal pain as was the case here
- If suspected consider performing computed tomography before proceeding to surgery
- The co-existence of these two pathologies may alter operative approach

http://dx.doi.org/10.1016/j.nhccr.2017.10.004

Diverticulitis: An atypical presentation

Mirain Phillips*, Tamsin E M Morrison*

Hull and East Yorkshire Hospitals NHS Trust, Yorkshire, UK

Introduction: Diverticulitis is a well described inflammatory condition of the wall of the gastrointestinal tract with an overall prevalence of 2-10% in developing countries. Typically, the descending and sigmoid colon are affected more commonly than the ascending colon and small bowel in the Western population. Diverticula of the distal ileum are particularly uncommon, with a reported rate of 0.06-1.3% (Jeong et al. 2014). Due to difficulty in pre-operative diagnosis, there is no consensus on therapeutic strategy for right-sided diverticulitis (Lee et al. 2010). Here, the authors present a case of non-Meckel's diverticulitis of the distal ileum in a Caucasian U.K. patient.

Case description: A 63 year old man presented to the Emergency Department with a one day history of abdominal distension, periumbilical pain radiating to the right iliac fossa, nausea and sweats. He had not defecated for 2 days but reported passing flatus. Past medical history included gout, rheumatoid arthritis and Ulcerative Colitis, managed with Sulfasalazine. He was not a smoker.

On examination, abdomen was visibly distended. There was maximal tenderness in the lower central abdomen and guarding to palpation. Digital rectal examination was normal. Chest radiograph was unremarkable. Plain abdominal film showed faecal loading of the colon, but no obstructive features. C-Reactive Protein (CRP), amylase and white cell count on admission were normal. On repeat testing, CRP was 208mg/L, white cell count $10x10^9$/L, venous lactate 2.3mmol/L and haemoglobin 13.1g/L.

Intravenous fluids and broad spectrum antibiotics were commenced. CT imaging was arranged in view of the severity of symptoms, biochemical findings, patient's age, medication and history of colitis. CT abdomen pelvis with oral contrast showed a severely inflamed ileal diverticulum. There was no suggestion of a diverticulum on previous radiological or endoscopic investigations. The patient proceeded to surgery for open resection of perforated diverticulum (39cm of ileum) and small bowel anastomosis.

Results and Conclusions: After 24 hour High Dependency observation, the patient made an uneventful recovery. Histological analysis confirmed a thin-walled, diffusely ulcerated, perforated ileal diverticulum resulting from obstructing food.

Anatomically, diverticula are characterised by herniation of mucosa and submucosa through the muscular bowel wall and a true diverticulum should involve all layers. Diverticula of the small bowel are more commonly proximal (75% jejunal, versus 5% ileal). The position, conversely to a Meckel's diverticulum, is usually on the mesenteric side of the bowel. The aetiology of jejuneo-ileal diverticula is not fully understood however focal muscular weakness, motility dysfunction, high segmental intraluminal pressure and biogenetic factors are believed to contribute (Nakatani et al. 2016).

There is close clinical and biochemical overlap between a presentation of appendicitis and right sided diverticulitis. However, previous studies have suggested subtle clinical variations to aid their distinction, such as duration