CASE REPORT – OPEN ACCESS

International Journal of Surgery Case Reports 6 (2015) 73–76

Contents lists available at ScienceDirect

International Journal of Surgery Case Reports

journal homepage: www.casereports.com

Late-onset renal vein thrombosis: A case report and review of the literature

Jessica L. Hogan [1], Stanton J. Rosenthal [3], Sri G. Yarlagadda [3], Jill A. Jones [3], Timothy M. Schmitt [3], Sean C. Kumer [3], Bruce Kaplan [3], Shenequa L. Deas [3], Atta M. Nawabi [*,2]

Department of Surgery, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160, United States

ARTICLE INFO

Article history:
Received 9 April 2014
Accepted 29 September 2014
Available online 21 November 2014

Keywords:
Renal vein thrombosis
Ovarian cyst
Late-onset renal allograft dysfunction
Simultaneous kidney pancreas transplant

ABSTRACT

INTRODUCTION: Renal vein thrombosis, a rare complication of renal transplantation, often causes graft loss. Diagnosis includes ultrasound with Doppler, and it is often treated with anticoagulation or mechanical thrombectomy. Success is improved with early diagnosis and institution of treatment.
PRESENTATION OF CASE: We report here the case of a 29 year-old female with sudden development of very late-onset renal vein thrombosis after simultaneous kidney pancreas transplant. This resolved initially with thrombectomy, stenting and anticoagulation, but thrombosis recurred, necessitating operative intervention. Intraoperatively the renal vein was discovered to be compressed by a large ovarian cyst.
DISCUSSION: Compression of the renal vein by a lymphocele or hematoma is a known cause of thrombosis, but this is the first documented case of compression and thrombosis due to an ovarian cyst.
CONCLUSION: Early detection and treatment of renal vein thrombosis is paramount to restoring renal allograft function. Any woman of childbearing age may have thrombosis due to compression by an ovarian cyst, and screening for this possibility may improve long-term graft function in this population.
Published by Elsevier Ltd. on behalf of Surgical Associates Ltd. This is an open access article under the CC BY-NC-SA license (http://creativecommons.org/licenses/by-nc-sa/3.0/).

1. Introduction

Renal vein (RV) thrombosis[2] is a rare but dreaded complication of renal transplantation, which often causes graft loss.[3] It is characterized clinically by sudden development of anuria accompanied by tenderness over the graft site.[4] Traditionally, RV thrombosis is diagnosed through ultrasound with Doppler[1] and is often treated with anticoagulation or mechanical thrombectomy.[5] Success is variable and is improved with early diagnosis and institution of treatment.[4]

Early RV thrombosis, which is defined as occurring roughly within the first two weeks post-transplant, has a reported incidence of approximately 0.4–6%.[6] The development of late renal vein thrombosis is more rare with an incidence of 0.5–4% after the fourteenth post-operative day (Table 1). The most common causes of early RV thrombosis are technical errors including a kink in the renal vein, an anastomotic stenosis, diminished flow due to hypovolemia or intrinsic renal allograft vasculopathy, and post-operative hypercoagulability.[1] Late causes include those previously mentioned as well as compression of the renal vein by a lymphocele or other fluid collection.[5,7]

Simultaneous kidney pancreas transplant is the gold standard of treatment for Type I diabetic patients who have developed end-stage renal disease (ESRD) because it significantly increases survival.[8,9] Yet, graft thrombosis can occur after this procedure and may result in failure of both grafts, particularly if the thrombosis occurs in the pancreatic vessels.[10] Traditionally, the pancreas allograft is placed in one iliac fossa and the renal allograft is placed in the contralateral iliac fossa[11]; however, occasionally the grafts may be placed within the same fossa to keep the opposite iliac

Table 1
Characteristics of early versus late renal vein thrombosis.

	Early RV thrombosis	Late RV thrombosis
Time course	Within 2 weeks post-transplant[6]	Greater than 2 weeks post-transplant
Incidence	0.4–6%[6]	0.5–4%
Causes	Kink in the renal vein Anastomotic stenosis Diminished flow[1]	Kink in the renal vein Anastomotic stenosis Diminished flow Compression of renal vein[5,7]
Prognosis	Poor	Very poor

* Corresponding author. Tel.: +1 913 486 0767.
E-mail address: anawabi@kumc.edu (A.M. Nawabi).
[1] First author.
[2] Senior author.
[3] Contributing authors.

http://dx.doi.org/10.1016/j.ijscr.2014.09.027
2210-2612/Published by Elsevier Ltd. on behalf of Surgical Associates Ltd. This is an open access article under the CC BY-NC-SA license (http://creativecommons.org/licenses/by-nc-sa/3.0/).

Fig. 1. CT imaging showing renal transplant (white arrow), renal vein stent (thin black arrow), and mass representing right ovarian cyst (thick black arrow).

artery and vein pristine, in case graft failure develops necessitating re-transplantation.

Here we present a case involving a young woman who underwent a simultaneous kidney pancreas transplant and subsequently developed very late-onset RV thrombosis due to incarceration of an ovarian cyst between the renal artery and vein.

2. Presentation of case

The patient is a 29 year-old female with a history of Type I diabetes and hypertension leading to end-stage renal disease in June 2011 requiring hemodialysis. The patient was placed on the UNOS list after completing her evaluation on November 3, 2011, for a simultaneous kidney pancreas transplant. A deceased donor kidney and pancreas from an 18 year-old became available with a negative cross-match, and she underwent simultaneous kidney pancreas transplantation with enteric systemic drainage. Both organs were placed at the right lower quadrant of the abdomen. The patient's post-operative recovery was uneventful, and she was discharged home on post-operative day 8 with standard immunosuppression of tacrolimus, mycophenolate, and a steroid taper.

On June 30, 2012, she developed sudden, severe suprapubic pain and urinary retention along with nausea, vomiting and diarrhea. She was admitted to the hospital and labs revealed leukocytosis, hematuria, and elevated creatinine. Doppler ultrasound of the

Fig. 2. Angioplasty (A and B) and stenting (C) of the transplant renal vein.

Download English Version:

https://daneshyari.com/en/article/4289442

Download Persian Version:

https://daneshyari.com/article/4289442

Daneshyari.com