poses a significant risk. For example, a survey of complications associated with yellow fever immunization showed that 4 out of 23 vaccinees who developed vaccine-associated viscerotropic disease had an underlying thymoma (and, we presume, Good's syndrome).[5] Most thymomas are slow growing with a tendency to recur locally; they seldom metastasize and can usually be cured by surgical resection.[6] Primary intrapulmonary thymoma without an associated mediastinal component, as seen here, is exceptionally rare.[7] These tumours arise from ectopic embryonic tissue. As far as we are aware, this is the first reported case of hypogammaglobulinaemia associated with such a tumour.

REFERENCES

1 Engels EA, Pfeiffer RM. Malignant thymoma in the United States: demographic patterns in incidence and associations with subsequent malignancies. *Int J Cancer* 2003;**105**:546–51

2 Kelleher P, Misbah SA. What is Good's syndrome? Immunological abnormalities in patients with thymoma. *J Clin Pathol* 2003;**56**:12–15

3 Souadhian JV, Enriquez P, Silverstein MN, *et al*. The spectrum of diseases associated with thymoma. *Arch Intern Med* 1974;**134**:374

4 Rosenow EC, Hurley BT. Disorders of the thymus. *Arch Intern Med* 1984;**144**:763–72

5 Eidex RB, for the Yellow Fever Vaccine Safety Working Group. History of thymoma and yellow fever vaccination. *Lancet* 2004;**364**:936

6 Maggi G, Casadio C, Cavallo A, *et al*. Thymoma: results for 241 operated cases. *Ann Thorac Surg* 1991;**51**:152–6

7 Srivastava A, Padilla O, Alroy J, *et al*. Primary intrapulmonary spindle cell thymoma with marked granulomatous reaction: report of a case with review of the literature. *Int J Surg Pathol* 2003;**11**:353–6

Spontaneous bilateral tubal ectopic pregnancy

Jullien Brady MBBS MRCOG
Margaret Wilson MBBS BSc

J R Soc Med 2005;**98**:120–121

Ectopic pregnancy is still an important cause of maternal mortality. Bilateral tubal ectopic pregnancy is very rare, and is usually the result of an assisted reproduction technique.

CASE HISTORY

A woman aged 26 was admitted after experiencing severe abdominal pain. She had been amenorrhoeic for six weeks and a urine pregnancy test was positive. She and her partner had been trying for conception and this had been achieved spontaneously. There were no risk factors for ectopic pregnancy in her medical history. The pain had been present for five days and had not been associated with any vaginal discharge or bleeding. A sudden increase in pain had prompted her self-referral.

She was mildly tender in the right iliac fossa but on pelvic examination there was no cervical excitation or adnexal tenderness. An early-pregnancy ultrasound scan was requested. After 24 hours on the ward she alerted the staff to a sudden increase in her abdominal pain, and abdominal examination now revealed generalized tenderness with rebound and guarding. At diagnostic laparoscopy, extensive blood was seen within the peritoneal cavity. Neither fallopian tube was clearly visible so a ruptured ectopic pregnancy was diagnosed. Mini-laparotomy, by Pfannenstiel's incision, disclosed a large ruptured ectopic pregnancy with destruction of the left fallopian tube. There also appeared to be a small unruptured ectopic pregnancy in the right fallopian tube. Left salpingectomy and right salpingotomy were performed and histological examination confirmed synchronous bilateral ectopic pregnancy. The β-human chorionic gonadotropin, which had been raised preoperatively, became normal—confirming complete removal of the pregnancies. The patient was counselled on her high risk of ectopic pregnancy and advised to attend for an early ultrasound scan in any future pregnancies.

COMMENT

In the UK about 11 in 1000 pregnancies are ectopic.[1] The most recent Confidential Enquiry into Maternal Deaths, reports 11 deaths from this cause in the past triennium; the number has been rising since 1991–1993. Synchronous bilateral ectopic pregnancy is very rare, and in most cases results from assisted reproduction techniques. The incidence is thought to be somewhere between 1 in 125 and 1 in 1580 extrauterine pregnancies.[2] Of the handful of reported cases of spontaneous bilateral ectopics, one came from our own hospital.[3]

Comprehensive clinical guidelines for the treatment of ectopic pregnancy have been published by the Royal College of Obstetricians and Gynaecologists.[4] Because of its rarity, synchronous ectopic pregnancy is not covered, but the principles of treatment can still be applied. Laparoscopic surgical treatment is preferred to open procedures, because the patient recovers more quickly and subsequent rates of intrauterine and ectopic pregnancy are similar.[5] Our patient, because of her acute symptoms, was not suitable for either laparoscopic surgery or medical management with methotrexate. At the time of surgery, examination of the contralateral tube governs treatment. In the present case the left tube had been destroyed, so salpingectomy

Department of Obstetrics and Gynaecology, Newham University Hospital, Plaistow, London E13 8SL, UK

Correspondence to: Mr J Brady

E-mail: jullien.brady@btopenworld.com

was performed. On the right, salpingotomy was performed to allow some chance of natural conception in future cycles.

REFERENCES

1 Lewis G, ed, and CEMACH. *Why Mothers Die 2000–2002. The Sixth Report of the Confidential Enquiries into Maternal Deaths in the United Kingdom*. London: RCOG Press, 2004

2 Adair CD, Benrubi GI, Sanchez-Ramos L, Rhatigan R. *Bilateral tubal ectopic pregnancies after bilateral partial salpingectomy. A case report. J Reprod Med* 1994;**39**:131–3

3 De Graaf FL, Demetroulis C. Bilateral tubal ectopic pregnancy: diagnostic pitfalls. *Br J Clin Pract* 1997;**51**:56–8

4 Kelly AJ, Sowter MC, Trinder J. *The Management of Tubal Pregnancy*. London: RCOG Press, 2004

5 Hajenius PJ, Mol BWJ, Bossuyt PMM, Ankum WM, Van der Veen F. Interventions for tubal ectopic pregnancy. *Cochrane Database of Systematic Reviews* 2000, Issue 1

Acute renal infarction

F T Leong MRCP[1] L J Freeman MRCP[2]

J R Soc Med 2005;**98**:121–122

The diagnosis of acute renal infarction is often delayed or missed. The condition is an important cause of renal loss and can point to serious cardiovascular disease.

CASE HISTORIES

Case 1

A man aged 62 and previously in good health was seen an hour after the abrupt onset of left iliac fossa pain and vomiting. He was afebrile, normotensive, and in sinus rhythm, and the only abnormality on examination was an area of tenderness in the lower left quadrant of the abdomen. Urine analysis, blood count, serum amylase, and tests of renal and liver function were all normal. A chest radiograph showed borderline cardiomegaly; abdominal X-ray was unremarkable. The pain improved with opioids and he was discharged home. He returned a week later, troubled by dull and unrelenting abdominal discomfort. This time he had epigastric tenderness and he was in atrial fibrillation. The electrocardiogram also showed borderline intraventricular conduction delay and non-specific repolarization abnormalities. The previous heart tracing was examined for signs of ventricular pre-excitation but none were found. (Blood specimens taken at this time subsequently revealed above-normal C-reactive protein [119 mg/L] and D-dimer [0.44 μg/mL] and normal serum amylase and renal function tests.) An intra-abdominal abscess was suspected and CT imaging was arranged, but he had a sudden cardiac arrest from which he could not be resuscitated.

Necropsy revealed extensive infarction of the left kidney, the artery to which was completely occluded by an embolus. From its appearance the infarction was judged to have occurred several days before death. The heart was greatly enlarged; the left ventricle in particular was severely hypertrophied. The heart valves were normal, and no intracardiac thrombus was found. Serial myocardial slices revealed no evidence of acute or old ischaemic changes, and the coronary arteries were only mildly atherosclerotic. Despite a diligent search including other abdominal organs and the brain, there was no evidence of embolism elsewhere. The death was attributed to a lethal arrhythmia that had arisen from previously unrecognized structural heart disease.

Case 2

A man of 76 who had been experiencing intermittent angina for the past three months was seen after two days of left-sided flank pain and nausea. Two weeks previously, while on holiday in the USA, he had had a sudden and severe attack of right lower quadrant abdominal pain with vomiting. A CT scan there had revealed two hypodense lesions in his right kidney, thought to represent possible

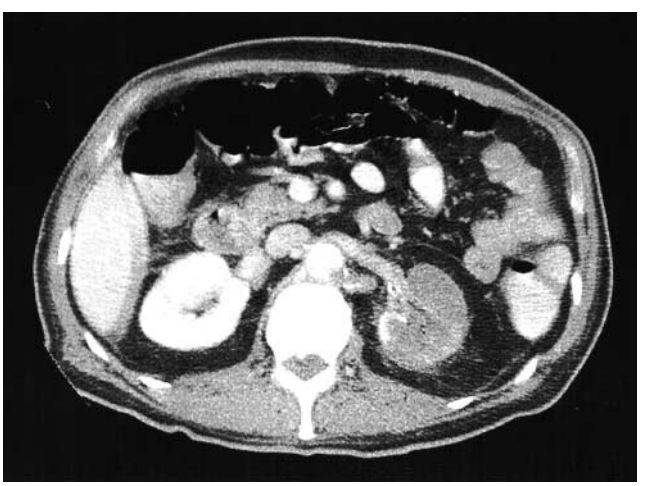

Figure 1 **Abdominal CT in case 2**

Departments of Cardiology, [1]Addenbrooke's Hospital, Cambridge, and [2]Norfolk and Norwich University Hospital, Norwich, UK

Correspondence to: Dr F T Leong, Department of Cardiology, Box 19, Addenbrooke's Hospital, Hills Road, Cambridge CB2 2QQ, UK

E-mail: fong.leong@addenbrookes.nhs.uk