Metastatic Squamous Cell Carcinoma of Colon Presenting as a Parietal Abscess

Ashish Dey • Shashi Dhawan • Vinod K. Malik

Received: 19 July 2012 / Accepted: 23 October 2012 / Published online: 25 November 2012
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Abstract Metastatic squamous cell carcinoma of the gastrointestinal tract is relatively uncommon. It is associated with a poor prognosis and behaves more aggressively. We report a case of metastatic growth in the ascending flexure of the colon that had eroded into the anterior abdominal wall muscles and resulted in a large parietal abscess. She had undergone radical hysterectomy followed by radiation therapy for stage II carcinoma of the uterine cervix 14 months back. Ultrasound guided drainage of the abscess was done as an emergency procedure to control the sepsis. After 3 days an extended Right Hemicolectomy with stapled ileo colic anastomosis was done with resection of a part of abdominal wall adherent to the growth with a grossly normal margin. Histopathological examination confirmed metastatic squamous cell carcinoma. She is disease free 2 months after surgery. Surgical management of the metastatic tumour was palliative but necessary to prevent intestinal obstruction in future.

Introduction

Squamous cell carcinoma of the uterine cervix metastasizes mostly to the lungs and paraortic nodes, whereas metastasis to the gastrointestinal tract and particularly to the colon is relatively rare [1]. Metastatic squamous cell carcinoma must be differentiated from a primary squamous cell carcinoma of the colon for definitive post operative management and

prognostication of the patient. The former has a poorer prognosis than primary SCC of the colon. We hereby report a case of squamous cell carcinoma of the cervix metastasizing to the colon and presenting with an abdominal wall abscess.

Case Report

A 56 year old lady presented to us with a abdominal wall abscess in the right lumbar and iliac region. She had fever and a palpable lump with surrounding cellulitis. There was no history of bleeding per rectum or any other symptoms suggestive of intestinal obstruction. She had a history of Werthiem's hysterectomy for a stage II carcinoma cervix followed by radiotherapy in a different hospital 14 months back. She also had undergone a laparoscopic cholecystectomy 8 months back for acute calculous cholecystitis. Blood examination revealed hemoglobin 8.6 g/dl with normal renal and liver function tests. USG of the abdomen showed an abscess in the abdominal wall with a mass in the ascending colon below the abscess. Colonoscopy was done after proper bowel preparation that revealed a large deep ulcer with stricture at the hepatic flexure. Colonoscopic biopsy revealed squamous cell carcinoma. CT Scan was done that showed an air fluid collection approximately 8×6×9 cm adherent to the underlying colon showing focal thickening (Fig. 1). A small tract extended from the colon to the parietal collection above. The liver showed a 3×3 cm hypodense lesion in the right lobe with subtle peripheral nodular enhancement suggestive of haemangioma. *Ultrasound guided drainage of the abscess was done as an emergency procedure to control the sepsis. Around 150 cc of pus was drained. Three days later she underwent extended Right hemicolectomy along with excision of the adherent portion of the anterior abdominal wall with all attempts at a grossly normal margin (Fig. 2). At the end of the resection a piece of tissue from the base of the resected area of the abdominal wall was also taken to know*

A. Dey (✉) • V. K. Malik
Department of General Surgery, Sir Ganaga Ram Hospital,
Room 1317, Old Rajinder Nagar,
New Delhi 110060, India
e-mail: ashishdey_78@rediffmail.com

S. Dhawan
Department of Pathology, Sir Gangaram Hospital,
Old Rajender Nagar,
New Delhi 110060, India

Fig. 1 CT scan of abdomen (with oral contrast) showing abdominal wall abscess with underlying colonic growth

the completeness of the resection. Histology showed an ulceroinfiltrative tumour measuring 4×3 cm. sections show moderately differentiated squamous cell carcinoma infiltrating from the serosal aspect and focally reaching upto the mucosa. All 14 pericolic nodes were free of any tumour (Fig. 3). The single piece of tissue at the base of the resected area was also free of tumour. 1 week post operatively there was a recurrent abscess at the same site of abdominal wall

that had to be drained under USG guidance. The output decreased gradually and stopped a week after surgery and the drain was removed. She is currently 2 months post surgery and is free of any symptoms.

Discussion

Distant metastasis in carcinoma of the cervix occurs mostly to the lungs or paraortic nodes. Rare sites of metastasis are orbits, brain, skin, spleen and muscle [2–6]. Metastasis to the gastrointestinal tract and particularly to the colon is extremely uncommon. A very similar case of carcinoma cervix metastasizing to the colon was reported by Ramakrishnan et al. [1]. This is therefore the only the second reported case of metastasis from squamous cell carcinoma of the cervix to the colon in India.

Fig. 2 Gross specimen of hemicolectomy

Fig. 3 Micrograph of the specimen

Metastasis to the colon can occur either by transperitoneal, hematogenous, lymphatic or transluminal [7]. However in our case the pericolic lymph nodes were all free of the tumour suggesting transperitoneal or hematogenous spread. Macroscopically the mucosa appeared to be intact and the bulk of the tumor was intramurally placed, extending through the serosa and invading the abdominal wall muscles. In primary squamous cell carcinoma of the colon, malignant squamous cells arise in the mucosa and infiltrate transmurally. However, in our patient the bulk of the tumour was present intramurally and was extending almost upto the mucosa. This therefore proves that the colonic lesion was in fact metastatic and not primary SCC of the colon. In future immunohistochemistry and gene expression profiling of the cell lines may help in differentiating primary from metastatic carcinoma with relatively ease [8].

Most cancers of the colon that perforate into the abdominal wall muscles are mucinous adenocarcinomas [9]. However as in our case and in the case reported by Tirziu et al., squamous cell carcinomas also perforate and infiltrate into the parietes [9]. They are also more aggressive tumours than adenocarcinomas with a worse prognosis [10]. An “en” bloc excision of the tumor, fistula wall and abscess drainage should be performed if possible [9]. There is no consensus regarding the exact treatment of this condition. Surgery and debulking of the tumour is primary mode of therapy. Radiotherapy is indicated for ablation of unresectable masses. Role of chemotherapy is controversial. Resection of the metastatic lesion may help palliate or prevent acute intestinal obstruction.

References

1. Seshadri RA, Tapkire R, Majhi U, Ganesharajah S (2009) Colonic metastasis from primary squamous cell carcinoma of the cervix. *Internet J Oncol* 6:2. doi:10.5580/739
2. McCulley TJ, Yip CC, Bullock JD, Warwar RE, Hood DL (2002) Cervical carcinoma metastatic to the orbit. *Ophthalm Plast Reconstr Surg* 18(5):385–387
3. Amita M, Sudeep G, Rekha W, Yogesh K, Hemant T (2005) Brain metastasis from cervical carcinoma – a case report. *MedGenMed* 7 (1):26
4. Agrawal A, Yau A, Magliocco A, Chu P (2010) Cutaneous metastatic disease in cervical cancer: a case report. *J Obstet Gynaecol Can* 32(5):467
5. Bhardwaj S, Mahajan D, Vir Gupta Y (2008) Metastatic squamous cell carcinoma of the cervix presenting as a splenic cyst. *JK Science* 10(3):146–148
6. Pathy S, Jayalakshmi S, Chander S, Thulkar S, Sharma MC (2002) Carcinoma cervix with metastasis to deltoid muscle. *Clin Oncol* 14 (6):447–448
7. Fraser AM, Morgan MN (1969) Secondary carcinoma from the cervix involving the large bowel. *Br J Surg* 56:317–318
8. Lou B, Engler D, Dubinsky W, Wu J, Vigneswaran N (2012) Acquiring metastatic competence by oral squamous cell carcinoma cells is associated with differential expression of α -tubulin isoforms. *J Oncol* Volume 2012, Article ID 491685, 9 pages
9. Tirziu R, Mazilu O, Iliescu D, Sima, Cretu O, Hut F, Blidisel A, Nicolau M, Vasile, Avrami I, Sargan V (2009) Future. An abscess of the abdominal wall with involvement of the subcutaneous tissue – possible sign of rectosigmoid cancer: a case report. *J Exp Med Surg Res* Year 16(4):255–258
10. Theodosopoulos TK, Marinis AD, Dafnios NA, Vassiliou JG, Samanides LD, Carvounis EE, Smyrniotis VE (2006) Aggressive treatment of metastatic squamous cell carcinoma of the rectum to the liver: a case report and a brief review of the literature. *World J Surg Oncol* 4:49