Ovarian cancer and dermatomyositis.

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Citation

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Abstract

INTRODUCTION

The link between dermatomyositis and malignancy is well established. Usually dermatomyositis has been shown to precede the diagnosis of ovarian cancer however we present a case here of where dermatomyositis has presented several years after the diagnosis of ovarian cancer.

CASE HISTORY

A 65 year old lady with no relevant past medical history was diagnosed in February 2006 with stage 3c ovarian adenocarcinoma. She underwent laparotmy, total abdominal hysterectomy, bilateral salpingo oophorectomy, omentectomy and intra peritoneal catheter insertion. It was noted in surgery there was widespread peritoneal disease. She made a slow recovery and in May 2006 she commenced the first of 6 cycles of intra peritoneal carboplatin. Post chemotherapy she was in clinical remission with no reoccurrence of symptoms and CA-125 was 32. She was doing well nine months post chemotherapy with normal examination and CA-125 of 19.

In May 2007 she relapsed with ascites and CA-125 rising to 673. She was started on carboplatin and taxol. After 2 courses of this regime she developed an allergic reaction to taxol and was switched to carboplatin and gemcitabine. In November after 6 cycles of chemotherapy a CT scan showed a reduction in the nodularity of the peritoneum, resolution of ascites and CA-125 level had fallen to 20.

In January 2008 the patient was in clinical remission with a CA-125 level of 15 and normal examination. Four months later she relapsed again with raised CA-125 to 943 and diffuse abdominal pain. CT scan revealed disease progression with an increase in peritoneal nodularity and development of a small amount of ascites. CA-125 had further increased to 3889. She was started on oral etopside in June 2008 and CT scan after three months revealed partial response with a decrease in peritoneal thickening and decreasing tumour markers. She completed 7 cycles of chemotherapy by November 2008, CA-125 had fallen to 97. At this point she was given a treatment break.

By January 2009 CA-125 had increased to 909 and she was admitted with a three week history of rash, muscle weakness and dysphagia. She complained of muscle aches and had noted difficulty in walking and as a result had become bedbound prior to admission. On examination she had proximal muscle weakness and an erythematous rash over her upper chest, arms (figure 1) and face. Blood tests revealed an elevated creatinine kinase level of 615 IU/L. The clinical suspicion was a diagnosis of dermatomyositis. At this point she was commenced on methylprednisolone on alternate days for 3 days and then with oral steroids. Electromyography showed neurophysiological evidence of an underlying inflammatory myopathic process consistent with dermatomyositis. Muscle biopsy from the left thigh showed histological features consistent with dermatomyositis (figure 2). She made slow progress in recovering but began to regain strength and was able to mobilize alone after a few weeks of treatment. Her swallowing was declared unsafe after assessment by the speech and language team and was commenced on nasogastric feeding whilst in hospital. Blood test showed her creatinine kinase level had come back down to normal. The possibility of further chemotherapy was discussed but delayed until there was a clinical improvement in the patient's performance status.

DISCUSSION

Dermatomyositis is a rare paraneoplastic syndrome which usually precedes malignancies such as ovarian, breast and lung cancer by a few months [1-4]. It is more commonly linked with lung cancer in men and ovarian cancer in women [5-6]. It is a systemic disorder that frequently affects the oesophagus,

lungs and, less commonly, the heart. It is characterized by the development of progressive proximal symmetrical muscle weakness, elevated levels of muscle enzymes, an abnormal finding on electromyography, and an abnormal finding on muscle biopsy [(7)]. Although dermatomyositis usually precedes the diagnosis of ovarian cancer it may present at anytime. As in the case described here the development of dermatomyositis after the diagnosis of initial ovarian cancer is rare [(3)]. In 2005 there were only five reported cases of dermatomyositis after an established diagnosis of ovarian cancer [(8)]. It is important for clinicians to be aware of the link between dermatomyositis and ovarian cancer. The skin manifestations may precede clinically obvious muscle symptoms by several months. Treatment involves general measures and measures to control both the muscle disease and the skin disease. In addition, some patients with dermatomyositis need treatment for other systemic manifestations or complications. Corticosteroid therapy remains the mainstay of treatment for the muscle disease in dermatomyositis[(8)]. Patients with dysphagia often need nasogastric feeding to maintain appropriate nutritional intake.

Figure 1

Figure 1- dermatomyositis rash

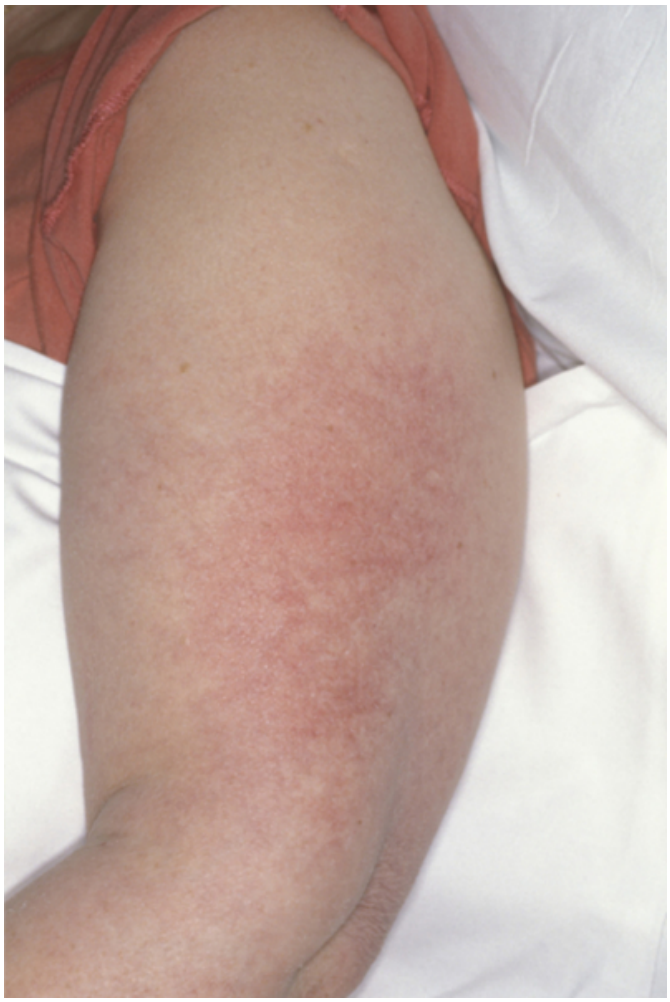
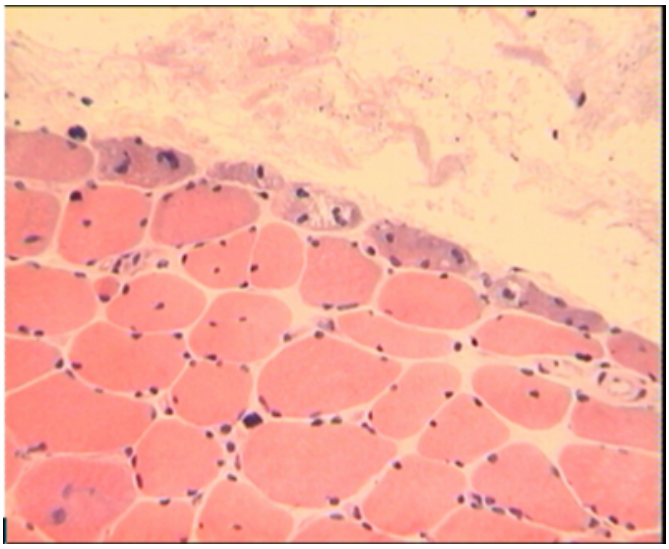


Figure 2

Figure 2 – muscle biopsy, perifasicular atrophy



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