



A MULTICYSTIC ULTRASONOGRAPHIC IMAGE OF ENDOMETRIUM IN TAMOXIFEN USE ; CASE REPORT

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Running Title: A bizarre ultrasonographic image of endometrium; case report

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ABSTRACT

Background: Tamoxifen is a nonsteroidal anti-estrogen that widely used as part of breast cancer. In addition to its anti-estrogenic properties, tamoxifen has a stimulatory effect on the endometrium. In this report we present a bizarre ultrasonographic image of endometrium in a patient receiving tamoxifen.

Case: A 55 year-old postmenopausal woman gravida 4 parite 3 presented us for spotty like vaginal bleeding. She had surgery for breast cancer and took tamoxifen for two years. Pelvic examination was made, a multicystic grape like ultrasonographic image was detected.

Conclusion: Early endometrial lesions can be detected by using transvaginal ultrasound in tamoxifen therapy. Oedema and enlargement of the stromal cells make different findings on the ultrasound.

Keywords: tamoxifen, ultrasound, endometrium

1. INTRODUCTION

Tamoxifen is a nonsteroidal anti-estrogen that binds to the estrogen receptor competitively and inhibits the action of estradiol . Tamoxifen is widely used as part of adjuvant treatment for primary hormone receptor-positive breast cancer and is also a treatment option for metastatic breast cancer. Tamoxifen can also be used a chemopreventive agent in patients deemed to be at high risk of developing breast cancer [1]. In addition to its anti-estrogenic properties, tamoxifen has a stimulatory effect on the endometrium [2] and patients have increased risk of developing endometrial pathology [2].

Transvaginal sonography, dilatation and curettage, endometrial sampling and hysteroscopy are the techniques for monitoring the endometrial effects of tamoxifen therapy. A 'thickened endometrial stripe' due to oedema and enlargement of the stromal cells, has been observed by vaginal sonography in 40-69% of tamoxifen-treated women [3]. In this case we report interesting and bizarre sonographic pictures of tamoxifen effected endometrium.

2. CASE REPORT

A 55 year-old 3 years postmenopausal woman gravida 4 parite 3 presented us for spotty like, brown vaginal bleeding. 30 months before this event she noticed a mass in her right breast. After imaging techniques biopsy was made and the result was carsinom. Lumpectomy and axillary lenf node dissection were made. The pathology result were infiltrative ductal carsinom, reactinal lenf nodes, two metastatic lenf nodes. Surgical margin had no carsinom, vascular and lenfoid invasion were positive. After surgery she started tamoxifen 10 mg/day and continued for 24 months. Her mother had breast carsinom and her grandmother had endometrium carsinom.

Pelvic examination and vaginal ultrasonography were made, pelvic examination was normal. The endometrium was thickened and multicistyc appaerance on ultrasonography [Figure 1]. We decided to make hysteroscopy for taking biopsy and for reducing the endometrial thickness. When we entered the cavity with the histeroscope we came across a huge bullose, blue-gray endometrial surface. It was like a sponge, we tried to take biopsies with the resectoscope but the endometrium was very slippery. We took biopsies from fundus and anterior, posterior and lateral walls. After histeroscopy we made fractione curettage. Curette slipped on the endometrial surface, no materials came to the curette. We sent biopsies to pathology. The result was endometrial polyp. One month later from the operation endometrial thickness was same before the operation but the ultrasonographic image was heterogen and the cystic components were reduced.

3. DISCUSSION

The aim of screening using transvaginal ultrasound in tamoxifen therapy is to detect early endometrial lesions, precancerous changes, early-stage endometrial cancers to minimize the mortality and morbidity. A bizarre patern on ultrasound causes great alarm on the part of clinician . In this case report grape like multicistyc ultrasonographic image and slippery endometrial cavity seems to indicate that tamoxifen effects endometrium and subendometrial part of the uterus and makes changes. In some cases the thickened area forms cystic and polypoid abnormalities. In the Pilot Breast Cancer Prevention Trial at the Royal Marsden Hospital, a randomized, double-blind controlled trial, the use of tamoxifen was associated with 7% of cysts, 3% of polyps, and 8% of both cysts and polyps [4]. Hysteroscopic examination often revealed tough, fibrous changes, which were ascribed a stromal origin.

To our knowledge, in the literature there isn't a grape like ultrasonographic image like our patient had. There are images that shows thin endometrium [5] , but a huge cystic endometrial polyp is a different case.

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Figure I: Transvaginal ultrasonographic image of endometrial polyp in tamoxifen using woman.

