

## ***Letter to the Editor***

---

### **Letrozole in Male Breast Cancer**

---

Sir,

Breast cancer is an uncommon disease in man and accounts for less than 1% of all malignancies in males. Hormonal therapy has been the mainstay of treatment for metastatic male breast cancer; however, the efficacy of aromatase inhibitors is still uncertain. There are only few reports exploring this treatment option. Here, we report the efficacy of letrozole in a patient of metastatic breast cancer in a man.

A 52 year old man presented in June 1997 with an ulcerated lesion of right breast. He underwent radical mastectomy. Primary tumour was 4 cms in diameter, infiltrating ductal carcinoma and all the axillary nodes were negative. The tumour was positive for estrogen and progesterone receptors. He received adjuvant radiation to the chest wall and axilla. Post-operatively patient was lost to follow up for 6 months. Later he was started on tamoxifen 20 mg a day. In February 2002, he relapsed in the liver and bones. He was treated with epirubicin (60mg/m<sup>2</sup>) and docetaxel (75mg/m<sup>2</sup>) for 6 cycles. He attained partial response in liver and stable disease in bone and was continued on tamoxifen. His liver lesions continued to regress. However, in March 2003, they again started progressing and he was started on letrozole. His disease in liver and bone stabilized for 8 months before liver metastasis progressed and letrozole was discontinued.

#### **COMMENTS**

Hormonal therapy has been the mainstay of treatment for metastatic male breast cancer for the past 5 decades, since men have a high response rate to hormonal manipulation. Farrow and Adair described the first response to orchidectomy in 1942<sup>1</sup>, and orchidectomy became the standard of

care for treatment of metastatic disease. Because of poor acceptance of orchidectomy and high operative risk of adrenalectomy and hypophysectomy, additive hormonal therapy is now often used as the first-line therapy. Tamoxifen has a response rate of 80% in oestrogen receptor positive tumours. Other hormonal agents used include ketoconazole, oestrogen, cyproterone acetate, corticosteroids, androgens, progestins, aminoglu-tethimide,<sup>2</sup> luteinizing hormone-releasing hormone (LHRH) alone or in combination with an antiandrogen in men.<sup>3</sup>

Selective aromatase inhibitors, anastrozole and letrozole have been approved for first-line treatment of metastatic breast cancer in women and exemestane is undergoing phase III trials.<sup>4</sup> However, in men, aromatase inhibitors may be problematic because the testicular production of estrogen is independent of aromatase and accounts for approximately 20% of circulating estrogens. The remaining 80% of circulating estrogens in men results from the conversion of androgens through aromatase.

There were only 6 case reports of metastatic male breast cancer treated with anastrozole in the past<sup>5-7</sup>. All the patients had received tamoxifen previously and none of the patients had undergone orchidectomy. There were no responses, but three of the patients achieved stable disease for more than 3 months. To the best of our knowledge this is the second case of metastatic male breast cancer treated with letrozole. The stable disease achieved in this patient for 8 months indicates that, like anastrozole, letrozole also shows some activity in male breast cancer.

## REFERENCES :

1. Farrow J, Adair FE. Effect of orchiectomy on skeletal metastases from cancer of the male breast. *Science* 1942;95:654.
2. Ravandi-Kashani F, Hayes TG. Male Breast Cancer: a Review of the Literature. *Eur J Cancer* 1998;34:1341-7.
3. Mouridsen H, Gershonovich M The Role of Aromatase Inhibitors in the Treatment of Metastatic Breast Cancer. *Semin Oncol* 2003;30 (suppl 14):33-45
4. Doberauer C, Niederle N, Schmidt C Advanced male breast cancer treatment with the LH-RH analogue buserelin alone or in combination with the antiandrogen flutamide. *Cancer* 1988;62:474-478
5. Knoche AJ, Michaud LB, Buzdar AU Efficacy of anastrozole in a consecutive series of advanced breast cancer patients treated with multiple prior chemotherapies and endocrine agents: M. D. Anderson Cancer Center experience. *Breast J* 1999;5:176-81.
6. Giordano SH, Valero V, Buzdar AU, Hortobagyi GN. Efficacy of Anastrozole in Male Breast Cancer: *Am J Clin Oncol* 2002;25:235-237.
7. Italiano A, Largillier R, Marcy PY, Foa C, Ferrero JM, Hartmann MT, et al. Complete remission obtained with letrozole in a man with metastatic breast cancer. *Rev Med Interne* 2004;25:323-4.

**Pavithran K**

Dept of Medical Oncology

Amrita Institute of Medical Sciences Cochin-26

E-mail : drkpavithran@hotmail.com

**Symposium on Paediatric Malignancies**Date : *December 30<sup>th</sup>-31<sup>st</sup>, 2005***Venue : Conference Hall**

All India Institute of Medical Sciences, New Delhi-110029

*Organizing Chairman :***Dr. D K Gupta**

Head, Paediatric Surgery, AIIMS

*For further Information contact :***Dr. Sandeep Agarwala,***Organizing Secretary*

Email : sandpagr@hotmail.com