## METASTATIC THYROID CANCERS TREATED AT RANGPUR.

#### Dr. Muhammad Abu TAHER1

## ABSTRACT

Thyroid cancer can appear as metastatic disease involving skeletal system as depicted in the two patients treated by surgery, radioiodine ablation and thyroxine at Rangpur.

#### INTRODUCTION

Well-differentiated papillary and follicular thyroid carcinoma may present with distant metastases in bone, lung, brain, lymphnode etc. and respond well to total thyroidectomy, radioiodine ablation therapy and thyroxine. Iodine-deficiency disorders are common in Northern Bangladesh and we started thyroid investigations by radionuclide techniques and ultrasound at Rangpur since 1990. Thyroid cancer treatment was started in CNMU, Rangpur in 1996 and the initial results were published in 2003.<sup>2</sup>

#### CASE 1

A 40-years-old woman presented with a history of swelling in front of neck and left side of forehead gradually increasing since 2004. X-ray showed osteolytic lesion in left frontal bone. Isotope bone scan shows highly vascular left frontal spot in dynamic phase (Fig.-1) and dough-nut sign<sup>3</sup> in static phase (Fig.-2). Thyroid scan shows a cold nodule in lower pole of right lobe (Fig.-3). On 10<sup>th</sup> April 2006, she had near-total thyroidectomy and excision of

left frontal swelling. Biopsy showed bony metastatic deposit of poorly differentiated follicular thyroid carcinoma with vascular invasion. She had 152 mCi of <sup>131</sup>I ablation on 18 April/06 and post-therapy scan showed faintly increased concentration of radioiodine only in thyroid bed and left frontal area. She was advised to take thyroxine 150 micrograms/day and followups in Nov. 2006 and March 2007 showed her euthyroid clinically and biochemically.

#### CASE 2

A 37-years-old woman presented with paraparesis for two and a half months. Spinal surgery at 5<sup>th</sup> thoracic vertebra was done on 30 May 2006 and biopsy showed bony metastases from follicular variant of papillary carcinoma of thyroid. Total thyroidectomy was done on 9 June/06. She was given 138 mCi of <sup>131</sup>I on 27 July/06. Now she can walk with a brace and is taking thyroxine 150 to 200 micrograms / day. She is euthyroid in last followup 9 months after <sup>131</sup>I treatment.

Director, Centre for Nuclear Medicine and Ultrasound (CNMU), Rangpur-5400, Bangladesh.

# Isotopic Bone Scanning of Case I patient.

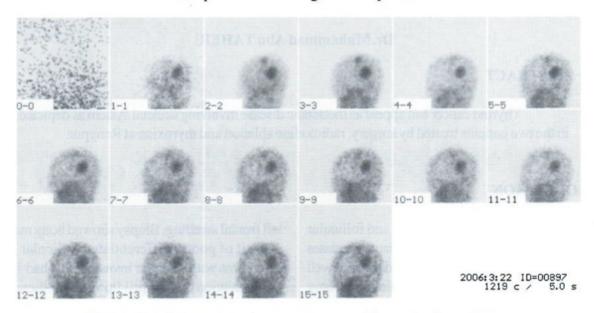


Fig.1 Dynamic bone scan shows vascular swelling on Lt. frontal bone.

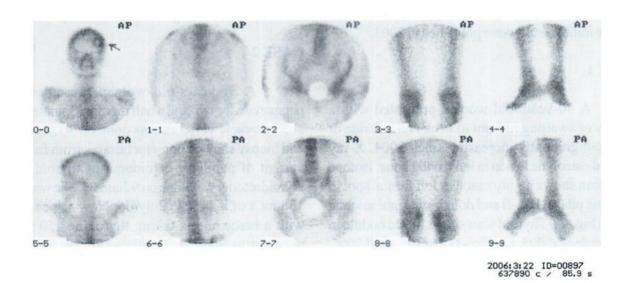


Fig.2 Static bone scan shows doughnut sign on Lt. frontal bone.

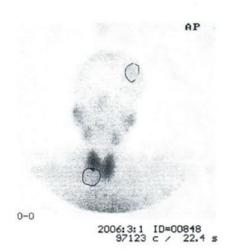


Fig.3 Thyroid scan shows cold nodule in Rt. lobe of thyroid.

## DISCUSSION

Most of our common people are not conscious about health and many persons are seen with long -standing goiters. As well-differentiated thyroid carcinoma is amenable to be cured, we should treat these patients with utmost care.

#### REFERENCES

- Taher MA, Loken MK. Thyroid cancer in University of Minnesota Hospital, The Philippine J Nucl Med 2003; 2: 21-42.
- Taher MA. Radioiodine therapy in thyroid carcinoma at Rangpur, Bangladesh. ASEAN J Rad 2003; IX: 4153-159.
- Hussain R, Rahman M, Momtaz S, Khan ASMH, Jehan AH. Dough-nut sign: a rare skeletal metastasis of thyroid carcinoma--a case report. Bangladesh J Nucl Med. 9: 51-53, 2006.