

## DEPARTMENT OF RADIO-DIAGNOSIS & IMAGING



### Introduction

Department of Radio Diagnosis and Imaging was introduced with the establishment of hospital as a very important clinical service render wing. Department is equipped with CT, USG, X-ray with CR system, Mammography & some other services. Department is willing to expanding services in interventional and therapeutic radiology with recent modalities.

### Services

#### 1. CT scan service

CT scan of whole body with plain and contrast enhancement is done in daily basis. High resolution CT, CT guided biopsy / FNAC are done whenever requested. CT scan for 3D (Three dimensional) conformal radiotherapy planning.

#### 2. Mammography Service:

Routine and screening mammography are performed in daily basis by high resolution CR cassettes and mammography software. Supplementary views, spot compression, magnification, ductography and mammography guided needle localization biopsy are also performed as requested. Mammography guided needle localization biopsy started from 19<sup>th</sup> may 2005 which it done for non palpable breast lesions.

#### 3. Ultrasonography Service :

USG of Abdomen / Pelvis, superficial body parts are performed in regular basis. USG guided FNAC, trans-vaginal USG are also performed as requested. Specila focus is given to breast mammography.

#### 4. X-ray Services :

General X-ray: Routine X-ray services are done in all week days. Emergency service is provided 24 hours a day. Other X-rays : IVU, Barium swallow, Barium meal, Barium follow through, Barium enema, Retrograde pyelography, MCU, T-tube Cholangiography, PTC, PTBD, Venogram, Sinogram, Fistulogram etc are performed as per request.

#### 5. Equipments :

a. **CT scan** : PRATICO - HITACHI, 3<sup>rd</sup> generation spiral CT with day light system and Algotech for image processing.

b. **Mammogram** : SENOGRAPHE 800 T from General Electric, USA.

### c. X-ray machines :

c-a. Simadzu 800 mA x-ray machine with fluoroscopy with telecommand facility.

c-b. Two 500 mA general X-ray machines upgraded to computerized radiography( CR) X-ray system.

### d. Ultrasonography :

1. HITACHI EUB-7500 machine with Color Doppler imaging & high resolution probes.

2. Portable ALOKA gray scale machine.

e. **Mobile X-ray:** Simadzu 500mA (rotating anode) X-ray machine.

f. **CR 975 :** Equipped with DICOM facility and Masterview for image manipulation hard & soft copy image storage facility.

g. HITACHI 500 mA ceiling suspended X-ray tube with transparent floating table & chest stand with AEC.

### Academic Activities:

The faculties are responsible for regular classes & training for students of B.Sc. in medical Imaging Technology from BPKIHS Dharan. Also actively taking part in orientation classes for allied health professionals from medical colleges and universities. Weekly interventional refresher courses regarding professional up-gradation of department team member. Breast USG & CR mammography research is going on.



Month	Quantity of Patients		Services						
	In	Out	Radiology		Ultrasound	Mammography	Fluoroscopy	Total Patients	Total
			Diagnostic	Therapeutic					
January	15	14	12	10	10	10	10	52	100
February	15	14	12	10	10	10	10	52	100
March	15	14	12	10	10	10	10	52	100
April	15	14	12	10	10	10	10	52	100
May	15	14	12	10	10	10	10	52	100
June	15	14	12	10	10	10	10	52	100
July	15	14	12	10	10	10	10	52	100
August	15	14	12	10	10	10	10	52	100
September	15	14	12	10	10	10	10	52	100
October	15	14	12	10	10	10	10	52	100
November	15	14	12	10	10	10	10	52	100
December	15	14	12	10	10	10	10	52	100
Total	180	170	150	120	120	120	120	600	1200

**Human Resources:**

Department has two(3) consultant Radiologists ( including one Chinese expert)., 5-Radiological Technologists, 2 - Senior Radiographers, 2-Radiographer, 1-Darkroom Technician 1- Staff Nurse, 2-Administrative staffs, 3 -Attendants, 1-security staff.

