Hospital Universitario De Salamanca - Salamanca, Spain

General Information

New breast cancer cases treated per year 230

Breast multidisciplinarity team members 13

Radiologists, surgeons, pathologists, medical oncologists, radiotherapists and nurses

Clinical Director: **Manuel Ramos Boyero**, MD, PhD

The Breast Unit of Salamanca University Hospital is part of the surgical department and provides multidiscipliary integrated breast cancer care since 1995. A team of breast oncoplastic surgeons, radiologists, medical oncologists, radiotherapy oncologists, pathologists, nurses, nuclear specialists, pathologists, radiologist, reconstructive plastic surgeons, geneticists, breast nurses and a psycho-oncologist treats patients according to most up to date international guidelines and clinical paths. In our Breast Unit we assist all the cases coming from the programme of breast cancer screening. Last year, we have treated 230 patients with newly diagnosed breast cancer disease, along with surgery for benign breast disease, while our outpatient diagnostic section saw about 5500 patients. All patients are discussed in the multidisciplinary (MDM) meeting before treatment starts, and in the postoperative MDM after surgery. Breast-conserving surgery is our goal with the aid of oncoplastic tecnics and intraoperative ultrasound. In selected patients, when a mastectomy is necessary, we indicate skin-sparing or nipple-sparing mastectomy wiht immediate reconstruction.

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Available services

- [x] Radiology
- [x] Breast Surgery
- [x] Reconstructive/Plastic Surgery
- [x] Pathology
- [x] Medical Oncology
- [x] Radiotherapy
- [x] Nuclear Medicine
- [x] Rehabilitation
- [x] Genetic Counselling
- [x] Data Management
- [x] Psycho-oncology
- [x] Breast Nurses
- [x] Social Workers
- [x] Nutritional Counselling
- [x] Survivorship Groups
- [ ] Sexual Health Counselling
- [x] Supportive and Palliative Care
- [ ] Integrative Medicine

Radiology

- [x] **Dedicated Radiologists** 3
- [x] **Mammograms per year** 9000
- [x] **Breast radiographers**
- [x] **Screening program**
- [x] **Verification for non-palpable breast lesions on specimen**
- [x] **Axillary US/US-guided FNAB**
- [x] **Clinical Research**

Available imaging equipment

- [x] Mammography
- [x] Ultrasound
- [x] Magnetic Resonance Imaging (MRI)

Available work-up imaging equipment

- [x] Computer Tomography
- [x] Ultrasound
- [x] Magnetic Resonance Imaging (MRI)
- [x] PET/CT scan

Primary technique for localizing non-palpable lesions

- [ ] Hook-wire (or needle localization)
- [ ] Charcoal marking/tattooing
- [ ] ROLL: radio-guided occult lesion localization

Available breast tissue sampling equipment

- [x] Stereotactic Biopsy (Mammography guided)
  - [x] Core Biopsy (Tru-cut)
  - [x] Vacuum assisted biopsy
- [x] Ultrasound-guided biopsy
  - [x] Fine-needle aspiration biopsy (FNAB, cytology)
  - [x] Core Biopsy
  - [x] Vacuum assisted biopsy
- [ ] MRI-guided biopsy
  - [ ] Core Biopsy
  - [ ] Vacuum assisted biopsy

Breast Surgery

- [x] **New operated cases per year (benign and malignant)** 430
- [x] **Dedicated Breast Surgeons** 4
- [x] **Surgeons with more than 50 surgeries per year** 3
- [x] **Breast Surgery beds** 4
- [x] **Breast Nurse specialists** 1
- [x] **Outpatient surgery**
- [x] **Intra-operative evaluation of sentinel node**
- [x] **Reconstruction performed by Breast Surgeons**
- [x] **Clinical Research**

Primary technique for staging the axilla

- [ ] Axillary lymph node dissection
- [x] Sentinel lymph node biopsy:
  - [ ] Blue dye technique
  - [ ] Radio-tracer technique
  - [x] Blue dye + Radio-tracer
- [ ] Axillary sampling

Reconstructive/Plastic Surgery

- [x] **Reconstructive/Plastic surgeons** 1
- [x] **Immediate Reconstruction available**

Type of breast reconstructive surgery available

- [x] Remodelling after breast-conserving surgery
- [x] Reconstruction after mastectomy:
  - [x] Two-stage reconstruction (tissue expander followed by implant)
  - [x] One-stage reconstruction
  - [x] Autogenous tissue flap
    - [x] Latissimus dorsi flap
    - [x] Transverse rectus abdominis (TRAM)
    - [x] Free-flaps (free TRAM, DIEP, SIEA, gluteal, etc.)
- [x] Surgery on the contralateral breast for symmetry
- [x] Oncoplastic breast conserving surgery

Pathology

- [x] **Dedicated Breast Pathologists** 1

Available studies

- [x] Cytology
- [x] Haematoxylin & eosin section (H&E)
  - [x] Surgical specimen
  - [x] Sentinel node
  - [x] Core biopsy
- [x] Frozen section (FS)
  - [x] Surgical specimen
  - [x] Sentinel node
- [x] Immunohistochemistry stain (IHC)
  - [x] Estrogen receptors
  - [x] Progesterone receptors
  - [x] HER-2
  - [x] Ki-67

Other special studies available

- [x] Fluorescence in-situ Hybridization for HER-2 gene (FISH)
- [x] Oncotype Dx (21-gene assay)
- [ ] MammaPrint (70-gene microarray)
- [ ] Prediction Analysis of Microarray 50-gene set (PAM 50)

Parameters included in the final pathology report

- [x] Pathology stage (pT and pN)
- [x] Tumour size (invasive component in mm)
- [x] Histologic type
- [x] Tumor grade
- [x] ER/PR receptor status
- [x] HER-2/neu receptor status
- [x] Peritumoural/Lymphovascular invasion
- [x] Margin status
- [x] size and weight of spcimen

Medical Oncology

- [x] **Dedicated Breast Medical Oncologists** 2
- [x] **Outpatient systemic therapy**
- [x] **Clinical Research**

Radiotherapy

- [x] Dedicated Radiation Oncologists
- [ ] Clinical Research

Available techniques after breast-conserving surgery (including experimental)

- [x] Whole-Breast RT (WBRT)
- [ ] Partial breast irradiation (PBI):
  - [ ] External beam PBI
  - [ ] Interstitial brachytherapy
  - [ ] Targeted brachytherapy (MammoSite, SAVI applicator, other devices)
  - [ ] Intra-operative RT (IORT)

Multidisciplinary Meeting (MDM) / Tumour Board (TB)

Regular MDM/TB for case management discussion

- [ ] Twice a week
- [x] Weekly
- [ ] Every two weeks
- [ ] Other Schedule

Cases discussed at MDM/TB

- [x] Preoperative cases
- [x] Postoperative cases

Specialties/services participating in MDM/TB

- [x] Radiology
- [x] Breast Surgery
- [x] Reconstructive/Plastic Surgery
- [x] Pathology
- [x] Medical Oncology
- [x] Radiotherapy
- [ ] Genetic Counselling
- [x] Breast Nurse Service
- [x] Psycho-oncology

Further Services and Facilities

Nuclear Medicine

- [x] Lymphoscintigraphy
- [x] Bone scan
- [x] Positron Emission Tomography (PET)
- [x] PET/CT scan

Rehabilitation

- [ ] Prosthesis service
- [x] Physiotherapy
- [x] Lymph-oedema treatment

Genetic Counselling

- [x] Specialist Providing Genetic Counselling/Risk assessment service:
  - [ ] Dedicated Clinical Geneticist
  - [x] Medical Oncologist
  - [ ] Breast Surgeon
  - [ ] General Surgeon
  - [ ] Gynaecologist
- [x] Genetic Testing available
- [x] Surveillance program for high-risk women

Data Management

- [x] Database used for clinical information
- [ ] Data manager available

Contact details

Clinical Director

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Radiology

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Breast Surgery

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Reconstructive Surgery

Raimundo López, MD	Head of the Plastic Surgery Dpt.		

Pathology

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Medical Oncology

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Germán Martín, MD	Medical Oncologist		

Radiotherapy

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From airport:

From Barajas Airport (Madrid) there is a direct bus service to the city of Salamanca.

By train:

From Madrid you can use the middle-distance train from the Railway Station of Madrid-Chamartin, c/ Agustín de Foxa, s/n.

By bus or sub-way/underground:

From Madrid you can use the buses of the Avanza line, which have their Bus Station at Barajas Airport (Madrid) or Bus Station (Estacion Sur, Madrid), c/ Méndez Álvaro, 83.

By car:

From Madrid you can use the Highway A-6, AP-51 and AP-50.

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