

***Guidelines to be followed by centres, services and units in order to be designated as Reference Centres, Services and Units of the National Health System as agreed by the Interterritorial Board***

**13. TOTAL SKIN ELECTRON RADIATION FOR MYCOSIS FUNGOIDES.**

Cutaneous T-cell lymphomas include a group of conditions related to the spread of T lymphocytes, with prevalence of skin conditions. During its progress, with an average length of 8 years, extracutaneous effects appear in lymphatic nodes, spleen, liver, lung, and bone marrow. They are classified under two main syndromes: micosis fungoides and Sezary syndrome. During the cutaneous stage the treatment consist of therapies affecting the skin. Therefore, total skin electron radiation with the adequate energy is a useful alternative, avoiding radiating deep areas and organs.

***A. Rationale for the proposal***

▶ Epidemiological data on mycosis fungoides (incidence and prevalence).	Incidence in Spain between 0.4 and 0.6 / 100,000 people per year <sup>1,2</sup> .
▶ Data on the use of total skin electron radiation.	Approximately 15% of the mycosis fungoides require radiotherapy. In Aragon, when this technique was employed, 12 cases were performed in 6 years. Thus, 25 new cases per year may be estimated in Spain. In Stanford (U.S.), centre with high experience, 226 cases in 23 years have been assisted, i.e. around 10 patients per year <sup>3</sup> .

***B. Guidelines to be followed by Centres, Services and Units in order to be designated as Reference Centres, Services and Units performing total skin electro radiation for mycosis fungoides.***

▶ Experience of the Reference Centres, Services and Units:  - Activity: • Number of total skin electron radiation	- 15 radiations in the last 5 years.
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<p>that should be performed in a year to ensure an adequate care.</p> <ul style="list-style-type: none"> <li>- Other data: research on the subject, postgraduate teaching, continuing training, etc.</li> </ul>	<ul style="list-style-type: none"> <li>- Unit participation in the internship and residency program of the centre.</li> <li>- Participation in research projects and publications in the field<sup>a</sup>.</li> <li>- Continuing training program standardized and authorized by the centre board of directors.</li> <li>- Multidisciplinary clinical sessions, at least monthly, in order to come to clinical decisions and to coordinate treatments.</li> </ul>
<p>► Specific resources of the Reference Centres, Services and Units:</p> <ul style="list-style-type: none"> <li>- Human resources required for the adequate implementation of the procedure.</li> <li>- Professional experience<sup>b</sup>.</li> <li>- Specific equipment required for the adequate implementation of the procedure.</li> <li>► Resources from other units and services besides those belonging to the Reference Centres, Services and Units required for the</li> </ul>	<p>Existence of a Hospital tumour board with an updated action protocol based on scientific evidence.</p> <p>Multidisciplinary team composed by:</p> <ul style="list-style-type: none"> <li>- Radiotherapeutic oncologist.</li> <li>- Radiophysicist.</li> <li>- Radiotherapy technicians.</li> <li>- Multidisciplinary team with 5 year experience: <ul style="list-style-type: none"> <li>- Radiotherapeutic oncologist with experience in electron treatments.</li> <li>- Radiophysicist with experience in electron dosimetry and in vivo dosimetry.</li> <li>- Radiotherapy technicians with experience in implementing conformal shield blocks.</li> </ul> </li> <li>- Photographic dosimetry with plate reader and densitometer.</li> <li>- Dosimetry equipment which at least, must have in vivo dosimetry diodes.</li> <li>- Ionization cameras for adequate sizing and shaping in electron dosimetry. <ul style="list-style-type: none"> <li>- Electron linear accelerator with enough source-to-skin distance to allow treatment of large fields.</li> </ul> </li> <li>- Adequate immobilization system.</li> <li>- Anatomical pathology services/unit.</li> <li>- Dermatology services/unit.</li> <li>- Haematology services/unit.</li> </ul>

adequate implementation of the procedure.	
<p>► Procedure and clinical results indicators of the Reference Centres, Services and Units <sup>c</sup>:</p>	<p><b>The indicators will be agreed with the Units that will be designated.</b></p>
<p>► Existence of an adequate IT system (Type of data that the IT system must include to allow identification of the activity and evaluation of the quality of the services provided)</p>	<ul style="list-style-type: none"> <li>- Filling up the complete MBDS of hospital discharge.</li> <li>- Besides, the unit must have a <i>registry of patients</i> with mycosis fungoides who have undergone a total skin electro radiation procedure, which at least must include: <ul style="list-style-type: none"> <li>- Data required for the tumour registry of the hospital<sup>5</sup>: patient's identity (medical record number), date of birth, sex, address, tumour site (International Classification of Diseases for Oncology<sup>6</sup>), date of diagnosis and recurrence, diagnosis method, tumour histology, stage. If applicable, cause and date of death.</li> <li>- Admission date and discharge date.</li> <li>- Date of the total skin radiation.</li> <li>- Mycosis stage.</li> <li>- Radiation dose used.</li> <li>- Damage improvement.</li> <li>- Reference to the monitoring procedure being followed.</li> <li>- Other procedures performed to the patient (ICD-9-CM).</li> <li>- Date when the different procedures were performed.</li> <li>- Complications (at least registering: early alopecia, delay in nail growth, swelling in the hands and feet, minor nosebleeds, self-limited anhidrosis, minor parotitis and gynecomastia in males, cornea injuries caused by eye shields, chronic nail dystrophia, chronic xerostomia, permanent partial alopecia, finger dysesthesia for more than a year).</li> </ul> </li> <li>- The unit must have the required data which should be sent to the Spanish National Health Service Reference Centres, Services and Units Appointment Commission Secretariat for reference unit monitoring.</li> </ul>

<sup>a</sup> Criteria to be assessed by the Appointment Commission.

<sup>b</sup> Experience will be accredited by certification from the hospital manager.

*° Clinical results standards, agreed to by the experts group, will be assessed, initially by the Appointment Commission, while in the qualification process, as more information from the Reference Centres, Services and Units is being obtained. Once qualified by the Appointment Commission, the Quality Agency will authorize its compliance, as for the rest of guidelines.*

### **Bibliography:**

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