

## **Evaluating service needs when considering the usage of chemotherapy agent (Mitoxantrone) in MS management**

### **Introduction**

The administration of a chemotherapy agent (cytotoxic) in MS is becoming more common, albeit often outside licensed indications within the United Kingdom at present. This is a form of therapy increasingly prescribed for people with who are experiencing frequent, severe relapses in order to bring the disease under immediate control. Treatment with a disease-modifying therapy is then often initiated for the long term. Such treatment regimens have been found to be effective in reducing relapses and stabilising progression of disability<sup>1</sup>

Where as it is common practice in an oncology setting to provide chemotherapy treatments, this often takes place in a designated chemotherapy suite, which is specially designed to accommodate such therapies.

Evaluating service needs when setting up a service can be a daunting task. This appraisal is provided as an aid to MS Nurses when setting up a new service and considers some of the topics for safe practice for themselves and their patients.

Chemotherapy agents (cytotoxic), without exception, have the potential to cause great harm if they are not prescribed, dispensed and administered and disposed of safely and correctly. These guidelines aim to minimise potential risks to both patients and health care workers alike, and should be read in conjunction with local NHS documents.

The term 'cytotoxic' relates to chemical compounds with the ability to disrupt cell division processes. They may be genotoxic, oncogenic, mutagenic or teratogenic.

### **Health and Safety:**

1. Healthcare professionals providing a service for Mitoxantrone therapy [or other cytotoxic therapies] must develop the knowledge and skills to underpin safe clinical practice. (There is a Skills for Health competency framework on this - [www.skillsforhealth.org.uk](http://www.skillsforhealth.org.uk))
2. The risk to patients is, in the main, well documented and will be balanced against clinical benefits.
3. To protect staff, health and safety measures must be in place; training needs identified and addressed, and a risk assessment undertaken. Significant risks must be recorded and notified in detail to the authorities Risk Manager and also the Occupational Health Department<sup>2</sup>.
4. In general, cytotoxic drugs are hazardous substances as defined by the Control of Substances Hazardous to Health regulations 2002<sup>3</sup> (COSH). Therefore, before commencing a service a full COSH assessment must be undertaken by the relevant authorities.

5. HR records should be kept for all post holders that have involvement with cytotoxic preparations.
6. Only persons who have been trained in the handling and administration of cytotoxic agents should administer cytotoxic therapies. MS nurses may link to local cancer units or networks for training.
7. Pregnant women, or women planning a pregnancy, should be advised of the potential risks associated with handling chemotherapeutic agents and be given the opportunity to refrain from preparing or administering these agents. Advice should be available from the Occupational Health Department. A risk assessment for pregnant workers must be completed.
8. During transportation cytotoxic drugs should be clearly labelled CYTOTOXIC DRUGS - HANDLE WITH CARE, and stored separately from other drugs.

### **Environmental Safety<sup>4,5</sup>**

The environment where administration occurs should:

- have adequate access to a sink and running water
- be a quiet environment, away from through traffic and without distractions.
- have appropriate protective equipment such as
  - Disposable sterile gloves non powdered
  - Protective visor/glasses, conforming to BS EN166
  - Plastic aprons, conforming to BS EN455
  - Eye wash Kit
  - Spillage Kit
  - Extravasation Kit
  - Yellow clinical waste bags, conforming to BS UN3291 (35 micron polythene)
  - Waste containers suitable for cytotoxic waste, conforming to BS UN3291

### **Education and Training**

Education and training for staff members who handle or may come into contact with a cytotoxic drug is essential

Staff should understand the potential risks and hazards associated with cytotoxic agents and are familiar with relevant PCT policy and procedures.

All staff that handle and administer cytotoxic therapy should have received anaphylaxis training and CPR training.

### **Responsibilities**

The employer has a legal duty to ensure the safety of staff and patients.

Employees also have a legal duty to take care of their own health and safety and that of others affected by their actions.

It is important that nursing staff understand their responsibilities in relation to the Scope of Professional Practice (UKCC 1992) and that employer's discharge their responsibility in relation to Health and Safety legislation such as COSH.

It is the responsibility of each practitioner to establish whether the drug they are handling is a cytotoxic agent.

## References

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3. The Control of Substances Hazardous to Health Regulations 2002 (as amended).  
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HSE Books: 2005.
4. Special Waste Regulations. Statutory Instrument 1996 No 972.
5. Environmental Protection Act 1990.

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