**Drug information**

**Background** The number of patients infected by HIV and hepatitis has increased over the years. Some of them have swallowing difficulties that require the placement of nasogastric or gastrostomy tubes. These chronic treatments need high compliance rates to avoid antiviral drug resistance and, eventually, treatment failure.

**Purpose** To review the existing antiviral drugs literature and develop administration recommendations for patients with swallowing problems.

**Materials and Methods** Formulations and recommendations were obtained directly from the manufacturers, or by a PubMed search and a search on the Micromedex database, when information was not available. A guide published by SENPE with physicochemical and formulation properties of drugs was also checked.

**Results** Table 1 shows the results. Extensive administration recommendations were found during literature searches but are not included in the present abstract. There was no information about the administration of adefovir, maraviroc or saquinavir through gastrostomy or nasogastric tube.

**Conclusions** Treatment compliance is key to ensuring the success of chronic antiviral treatments and it is important to consider special situations, such as swallowing problems. This guide for nasogastric treatment of vitamin D deficiency/insufficiency in the literature.

**MMUH clinicians were experiencing difficulty treating patients with vitamin D deficiency/insufficiency as:**

- There were no definitive guidelines for the treatment of vitamin D deficiency/insufficiency.
- There is no licenced preparation containing cholecalciferol or ergocalciferol as a single drug formulation in Ireland.

Guidance for MMUH clinicians was therefore necessary.

**Purpose** To develop a protocol for the treatment of vitamin D deficiency/insufficiency.

**Materials and Methods** Review of treatment algorithms for treatment of vitamin D deficiency/insufficiency in the literature. Compilation of vitamin D products currently available in Ireland. Liaison with MMUH clinical staff to ensure production of a protocol that is accessible to all disciplines.

**Results** A treatment algorithm was prepared detailing two specific guidelines for the treatment of:

- Vitamin D deficiency (serum 25-hydroxy-vitamin D <25 nmol/L)
- Vitamin D insufficiency (serum 25-hydroxy-vitamin D 25–50 nmol/L)

The protocol recommends vitamin D preparations, including one unlicensed preparation, which are available in the MMUH and accessible in the community.

The protocol also recognises the limitation of giving guidance on treating a condition that may be affected by numerous clinical scenarios or that may require input from specialist physicians. Where applicable, consultation with the relevant medical team(s) is recommended.

**Conclusions** MMUH patients diagnosed with vitamin D deficiency/insufficiency are treated in a standardised manner in accordance with available clinical evidence. The protocol ensures delays in treatment are minimised and physicians are aware of the particular considerations involved in the management of vitamin D deficiency/insufficiency.

No conflict of interest.

**Development of a protocol for the treatment of vitamin D deficiency/insufficiency in adults**

**Background** Recent medical research has highlighted that vitamin D deficiency/insufficiency is a significant public health problem. A UK study found that more than 50% of the adult population had insufficiency and 16% had deficiency. [1] Low vitamin D levels have been linked to rickets, malignancies, cardiovascular disease, type 2 diabetes and some autoimmune diseases. [1] Therefore, appropriate management of Vitamin D deficiency/insufficiency is essential.

This increased awareness among prescribers of treating vitamin D deficiency was apparent in the Mater Misericordiae University Hospital (MMUH):

- Medicines Information enquiries regarding treatment of vitamin D deficiency had increased.
- Biochemistry assay numbers for vitamin D (25-hydroxy-vitamin D) had increased.
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No conflict of interest.
Materials and Methods We conducted a retrospective observational study. We included all patients with MBC in 2007. Using the digital history, sociodemographic variables (age, sex), clinical (histologic type, oestrogen receptor, ER, progesterone receptor, PR, human epidermal growth factor receptor 2, HER-2, progression from primary tumour, appearance and location of metastases, lymph node involvement, survival, deceased) and therapeutic histories (radiotherapy, hormone therapy, chemotherapy) were collected.

Results We included 43 patients with a mean age of 54.5 years (100% female). The most common histological types were infiltrating ductal (60%) and lobular (24.4%) tumours. ER and PR were positive in 75.6% and 50%, respectively. Overexpression of Her-2 was negative in 73.7%. 69.2% of patients with MBC had progressed from primary tumour. The metastatization appeared at an average of 44.1 months since diagnosis. The most common sites of metastases were bone (34.06%), lung (16.48%) and liver (20.86%). 93.9% of patients had lymph node involvement and 77.6% were in the terminal phase. 95.3% of patients had received radiotherapy. Endocrine therapy used was fulvestrant (22.97%), anastrozole (21.62%), tamoxifen (20.27%). All patients received chemotherapy, the most used first-line schemes being: epirubicin/cyclophosphamide/docetaxel (50.6%), cyclophosphamide/epirubicin/fluorouracil (20.4%) and cyclophosphamide/methotrexate/fluorouracil (16.6%) in combination with trastuzumab or not. In successive lines, combinations of vinorelbine, docetaxel, capetitabine, carboplatin, gemcitabine were prescribed. Lapatinib and bevacizumab were used from the fourth-line treatment.

Conclusions Radiotherapy, not indicated in MBC, was used in early stages of the disease. Due to the variability of patients, treatment regimens are diverse and a predefined schema is not appropriate. Bevacizumab and lapatinib were used in late-stage treatment in patients who had not responded to standard treatment.

No conflict of interest.

DGI-027 EFFECTIVENESS AND SAFETY OF CLOFARABINE IN PAEDIATRIC PATIENTS WITH ACUTE LEUKAEMIA

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Background Clofarabine is a purine nucleoside antimetabolite, a second-generation antineoplastic indicated for the treatment of acute lymphoblastic leukemia in paediatric patients (≤21 years) who have relapsed or are refractory after receiving at least two prior regimens and who have no other treatment options that provide a durable response.

Despite progress in leukaemia treatment, most children who relapse have a dismal prognosis. New approaches are needed.

Purpose To assess the effectiveness and safety of clofarabine in paediatric patients with refractory or relapsed acute leukaemia.

Materials and Methods This was an observational retrospective study. We included all paediatric patients diagnosed with acute leukaemia who received clofarabine as antineoplastic treatment during 2007–2011.

We used the computer programme Oncofarm for prescribing, preparation and validation of chemotherapy treatments and collected data for number of patients, age, sex, weight, height and treatment schemes lines administered prior to clofarabine.

In addition, we used medical records as a source of safety data regarding potential adverse reactions due to clofarabine.

Results During the study period clofarabine was administered to a total of six paediatric patients (4 boys and 2 girls) with a median age of 11.5 years (5–16 years).

They had received a median of 2 prior lines of treatment. Later treatment schedules used in 83.3% of these patients included 40 mg/m² clofarabine in combination with other chemotherapy drugs with a median of 2 administered cycles. In the rest (1/6) clofarabine was used at 52 mg/m² as monotherapy.

66.6% of patients achieved complete remission and 50% were transplanted.

Mucositis grade IV and pancytopenia were detected in two patients and palmar erythema in one patient. All patients had a transient transaminase increase.

No conflict of interest.