**DGI-045 MANAGEMENT OF THE HAEMATOLOGICAL TOXICITY INDUCED BY BENDAMUSTINE**

A Boso-Ribelles, A Morego-Soler, B Arribas-Diaz, JC Titos-Arcos, AM Rizo-Cerdá, P Selvi-Sabater, MC Sánchez-Mulero, I Sánchez-Martínez, N Manresa-Ramón, J León-Villar, Hospital Morales Meseguer, Hospital Pharmacy, Murcia, Spain

**Background** Bendamustine is approved in Spain for the treatment of chronic lymphocytic leukaemia (CLL), Non Hodgkin Lymphoma (NHL) and multiple myeloma (MM). The most frequent adverse reactions are haematological. Usually patients require supportive treatment with granulocyte colony-stimulating factors (G-CSF) for neutropenia and erythropoietins for anaemia.

**Purpose** To describe the approach to neutropenia and anaemia caused by bendamustine in patients diagnosed with NHL, CLL and MM in our Hospital

**Materials and Methods** Descriptive and retrospective study of patients treated with bendamustine between November 2008 and February 2012 in our hospital. We collected data on age, sex, diagnosis, neutrophils count and haemoglobin before treatment and after receiving bendamustine, the proportion of patients requiring G-CSF (filgrastim or pegfilgrastim) or erythropoietins (darbepoetin alfa). Average number of G-CSF and erythropoietins doses.

**Results** A total of 38 patients received bendamustine, of whom 13 were women and 25 were men, with a mean age of 67 years old. 28 patients were diagnosed with NHL, 4 with MM and 6 with LLC. Before treatment, the neutrophils count was 4,846/mm³ and haemoglobin 11.7 g/dL. Later these figures were 2,440/mm³ for neutrophils and haemoglobin 11 g/dL. 75.7% of patients required G-CSF and 10.5% erythropoietins. The median number of doses of G-CSF and darbepoetin alfa respectively were 6 and 2.5.

**Conclusions** Bendamustine appears well tolerated. Supportive treatment with G-CSF is required in the majority of patients to maintain neutrophil count. This is not the case for anaemia, which occurs less frequently, requiring less rescue treatment. However these patients require close monitoring during treatment.

No conflict of interest.

**DGI-046 MONITORING OF ADHERENCE TO TREATMENT AND ADVERSE EVENTS IN THE MANAGEMENT OF PATIENTS WITH HIV INFECTION**

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A Appolloni, E Locchi, L Calza, V Colangioli, R Manfredi, E Magistrelli, F Piro, G Papa, P Viale, C Puggioli, Clinical Pharmacy, S. Orsola-Malpighi Hospital University of Bologna, Bologna, Italy; Infectious Diseases, S. Orsola-Malpighi Hospital University of Bologna, Bologna, Italy

**Background** Highly active antiretroviral treatment (HAART) is associated with improved health outcomes for people living with HIV/AIDS. Successful long-term treatment of HIV/AIDS requires near-perfect adherence to HAART. Constant monitoring of adherence to HAART and evaluation of related adverse events are two essential aspects for optimal management of patients with HIV.

**Purpose** To monitor adherence to antiretroviral treatment and adverse events of the outpatients of an HIV referral centre (department of Clinical Infectious Diseases, Policlinico S.Orsola-Malpighi, Bologna).

**Materials and Methods** The pharmacist was introduced in the department of Clinical Infectious Diseases in order to distribute the antiretroviral drugs and give information on the proper storage, use and possible interactions associated with the treatment. The pharmacist gives out an adherence questionnaire (10 questions about adherence, co-administered drugs and adverse events) to each patient to complete and return during the following visit. This information was entered into a database (Access) and the adherence to treatment and incidence of adverse events was calculated.

**Results** We analysed the adherence questionnaires of 659 patients, 74% of whom reported 100% adherence to treatment. Co-administered medicines may lead to poorer HAART adherence: patients taking polypharmacy showed medium-low adherence to treatment. Adherence was found to correlate inversely with the daily pill burden.

In terms of adverse effects, we developed a pharmacovigilance system, reporting 15 adverse drug reactions, 27% of which were rated severe. We analysed physical changes, gastrointestinal disorders and neuropsychiatric symptoms associated with the following regimens: efavirenz/emtricitabine/tenofovir, emtricitabine/tenofovir + atazanavir/ritonavir, efavirenz/emtricitabine/tenofovir, emtricitabine/tenofovir + atazanavir/ritonavir, efavirenz/emtricitabine/tenofovir + darunavir/ritonavir, abacavir/lamivudine + emtricitabine/tenofovir + darunavir/ritonavir, abacavir/lamivudine + atazanavir/ritonavir, abacavir/lamivudine + darunavir/ritonavir. Our results showed that the regimens with darunavir correlated with a lower incidence of side effects and perception of physical changes.

**Conclusions** The physician-pharmacist collaboration is an important support in monitoring adherence and adverse events related to HAART and contributes significantly to the optimal management of patients with HIV infection.

No conflict of interest.

**DGI-047 MORPHINE, OXYCODONE AND FENTANYL PRESCRIBING PATTERNS IN THE LOCAL HEALTH AUTHORITY OF MESSINA, ITALY**

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S Coppolino, C Sgroi. P.O. Banone I. Romeo, U.O.S. Farmacia, Patti (Messina), Italy; ASP Messina, Dipartimento del Farmaco, Messina, Italy

**Background** Pain is associated with significant economic, social and health impact. The cost of uncontrolled pain is enormous, both to individuals and to society as it leads to a decline in quality of life and disability. Several publications and guidelines stress the efficacy and safety of opioid-based treatment for cancer and non-cancer pain management. Until recently Italian legislation was very restrictive concerning the use of opioids, making Italy one of the lowest users of medical opioids in Europe. In 2010 law no. 38 eased the prescription of opioids for cancer and non-cancer pain.

**Purpose** To evaluate the incidence and cost of using morphine (N02AA01), oxycodone (N02AA05) and fentanyl (N02AB03) in order to assess prescribing patterns in the Local Health Authority (LHA) between 01/01/2010 and 30/09/2012.

**Materials and Methods** Data were collected from ‘Farmanalis.it’ database which records all prescriptions reimbursed by the Messina LHA. All consumption data were expressed in a standardised way and costs as direct costs to the LHA and recorded on a data sheet.

**Results** During the 2010–2011 period the consumption of morphine (N02AA01), oxycodone (N02AA05) and fentanyl (N02AB03) was analysed.

**Conclusions** The physician-pharmacist collaboration is an important support in monitoring adherence and adverse events related to HAART and contributes significantly to the optimal management of patients with HIV infection.

No conflict of interest.
pains and form the basis for communication among healthcare providers, such as General Practitioners, in order to improve appropriate prescribing policies.

No conflict of interest.

**NEW ORAL ANTICOAGULANTS: HOW ARE THEY BEING USED?**

**Materials and Methods** The period of study was January 2010–September 2012. We carried out a study on the patients prescribed either of the two new OACs included in the formulary. A data collection sheet was designed in which the parameters recorded were: gender, age, indication and observations (if any adverse reaction had been described).

**Results** In the period January 2010–September 2012, a total of 86 patients (38% male) were treated with rivaroxaban, with a mean age of 66 (21–91) years; whereas in the period December 2011–September 2012 (dabigatran was included later in the formulary), 55 patients (60% male), with a mean age of 74 (45–95) years, were treated with dabigatran. 84 out of the 86 patients treated with rivaroxaban received it in prophylaxis after having undergone knee or hip replacement. Nevertheless, dabigatran was used mostly in nonsurgery patients, only 2 out of the 55 patients were traumaology patients.

Only one minor bleed was reported in one patient diagnosed with atrial fibrillation and treated with dabigatran, and it should be taken into account that this patient exhibited thrombocytopenia at the time the bleeding occurred. No other adverse effects related to the administration of these drugs were found.

To date, the price of these new OACs is more than ten times higher than anti-vitamin K.

**Conclusions** Despite the fact that the new OACs have shown a good option compared to anti-vitamin K, their use in our hospital is still moderate, for two main reasons: their high cost and the uncertainty about their management in critical situations.

No conflict of interest.

**OFF-LABEL USES OF MYCOPHENOLATE MOFETIL**

**Background** The implementing Law 1015/2009 normalises the compassionate use of investigational drugs, access to off-label and unauthorised drugs in Spain.

Mycophenolate mofetil (MM)/MA have been used in off-label conditions to treat kidney diseases.1-5

**Purpose** To describe the dose and effectiveness of MM/MA in the treatment of nephritis.

**Materials and Methods** Observational, cross-sectional study including all patients diagnosed with nephritis treated with MM/MA in off-label conditions during July 2012.

Diagnosis and dose were recorded. Serum creatinine and the value of urinary proteins were collected at the beginning of the treatment and during the month of the study.

**Results** 22 patients were included, 14 were treated with MA and 8 with MM.

Of the patients treated with MA, 50% asked to be treated for nephritis, 28.6% for lupus and 21.4% for polyarteritis nodosa. (Both the lupus and the polyarteritis nodosa were giving clinical kidney symptoms.)

The usual dosage was every 12 hours (12/14), the most used dose being 560 mg (10/14).

The mean serum creatinine at the beginning of treatment was 1.14 mg/dl (SD .4) and decreased to 0.95 mg/dl (SD 0.3) at the end of the study. The urinary proteins value decreased from 35.11 mg/dl (SD 1.14) to 7.3 (SD 3.2) at the beginning of treatment to 26.2 (SD 3.2) at the end of the treatment.

Of the patients treated with MM 62.5% requested treatment for nephritis, 28.6% for lupus and 21.4% for polyarteritis nodosa. (The usual dosage was every 12 hours (12/14), the most used dose being 560 mg (10/14).

The mean serum creatinine at the beginning of treatment was 1.14 mg/dl (SD .4) and decreased to 0.95 mg/dl (SD 0.3) at the end of the study. The urinary proteins value decreased from 35.11 mg/dl (SD 1.14) to 7.3 (SD 3.2) at the beginning of treatment to 26.2 (SD 3.2) at the end of the treatment.

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