Conclusions Lenalidomide’s haematological toxicity is dose-related and often made worse by the basal bone marrow damage due to the haematological disease. Despite this certainty, hardly half of the patients with platelet or neutrophil damage had their dose or schedule adjusted. At this point, the patients could benefit from hospital pharmaceutical care. Important limitations of our study were lack of data about support measures and the small number of cases.

No conflict of interest.

**GRP-110** LINEZOLID ADVERSE REACTIONS. A ONE YEAR OVERVIEW

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Background Linezolid is an antimicrobial approved for the treatment of hospital or community-acquired pneumonia and complicated skin and soft tissue infections due to Gram positive bacteria. Its use, though effective, is not free from possible harm.

Purpose To describe the incidence and nature of the adverse reactions related to linezolid, taking place before and after the 28-day limit given in the label information.

Materials and Methods All the linezolid treatments over one year (September 2011–September 2012) were recorded. Data sources were the electronic chart as well as the electronic prescription programme.

Results 280 cases were recorded, the median treatment duration being 8 days (1 to 73 days). 4 treatments were interrupted early due to potential interactions with antidepressants. A total of 27 patients developed adverse reactions.

Among the 255 patients treated for less than 28 days, 19 developed adverse reactions. 14 presented suppression of at least one myeloid cell line, 7 of them requiring transfusions (one with adverse skin reaction as well). Among the others, two had diarrhoea, one a skin reaction, one vomiting and the remaining patient, asthenia. Median treatment duration in patients with adverse reactions treated for less than 28 days was 12 days (3 to 27 days)

25 patients exceeded 28 days of treatment, 8 of whom had adverse reactions. Seven presented suppression of at least one myeloid cell line, 5 of whom required transfusion. The other patient suffered from asthenia. Median treatment duration in these patients was 37 days (32 to 56 days).

Conclusions Attention should be paid to blood cell counts from the beginning of the treatment, since, as seen, hematologic adverse reactions are not limited to treatments lasting more than 28 days. The same is applicable to other less frequent reactions such as skin reactions, vomiting and asthenia.

No conflict of interest.

**GRP-111** MANAGEMENT OF METHOTREXATE-INDUCED RENAL FAILURE WITHOUT GLUCARPIDASE

doi:10.1136/ejhpharm-2013-000276.111

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Background Glucarpidase (Voraxaze) is effective in the treatment of methotrexate (MTX)-induced renal dysfunction but many cases this can be handled with standard treatment.

Purpose To describe the progress of a patient with MTX-induced renal failure in whose management glucarpidase was not used.

Materials and Methods A 13-year-old girl with acute lymphoblastic leukaemia treated with high-dose MTX. Baseline laboratory tests were normal, except for elevated transaminases and GGT.

Results The patient received her first consolidation cycle with 500 mg/m² of MTX in 30 minutes, followed by 4500 mg/m² in 23.5 hours, oral mercaptopurine 30 mg/m²/day and triple intrathecal therapy. Simultaneously, she received hydration/alkalinisation (3000 ml/m²/day). There was no pharmacological interaction to MTX. 24 hours after the MTX infusion stared, the serum creatinine level (Cr) had tripled (see the table below). The following measures were taken: hydration/alkalinisation (4500 ml/m²/day), colestyramine (3 g/6 h) and folic acid rescue at 500 mg/m²/6 h 31 hours after the start of the MTX infusion. Although the protocol provides for the possibility of administering glucarpidase, it was decided not to do this because the methotrexate level was <250 µM and glucarpidase administration can be delayed until 96 hours after the start of MTX infusion. Difficulty in the subsequent monitoring, the absence of effect in renal function improvement and high cost were the reasons for delaying the treatment until at least having levels at 36 and 48 hours. Although Cr values were still high, elimination kinetics of the drug were seen as adequate. Without the use of glucarpidase, methotrexate levels were undetectable at day nine. The patient recovered her baseline renal function and did not have mucositis or liver toxicity.

Conclusions An early intervention with supportive treatment based on folic acid, hydration and urine alkalinisation was effective in the management of MTX-induced renal toxicity.

**Abstract GRP-111 Table 1**

<table>
<thead>
<tr>
<th>Time since MTX infusion started (h)</th>
<th>Cr (mg/dL)</th>
<th>MTX levels (µM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.35</td>
<td>0</td>
</tr>
<tr>
<td>24</td>
<td>1.12</td>
<td>190</td>
</tr>
<tr>
<td>36</td>
<td>1.41</td>
<td>24</td>
</tr>
<tr>
<td>48</td>
<td>1.32</td>
<td>5.9</td>
</tr>
</tbody>
</table>

No conflict of interest.

**GRP-112** MEDICAL DEVICES IN MOROCCO: WHAT GUARANTEES OF QUALITY AND SAFETY?

doi:10.1136/ejhpharm-2013-000276.112

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Background Nowadays, all over the world, many medical devices, initially considered as non-risk or low risk, have been proved to be extremely dangerous to human health, as evidenced by the latest scandal of PIP implants.

Purpose To report the experience of Mohammed V Military Teaching Hospital of Rabat in evaluating the quality and safety of medical devices and to analyse elements that can compromise the quality of these products in our country.

Materials and Methods 30-month prospective study (January 2010–June 2012). We collected claims relating to the quality of medical devices at our hospital, in normal conditions of acquisition, dispensing and use. We also analysed the processes of placing on the market medical devices, the systems governing their use in hospitals and the main Moroccan rules regulating them.

Results 80 claims were collected. They concerned: catheters (40%), surgical drapes (20%), gloves (17%) and other medical devices (23%).
47% of their defects were discovered before they were used in patients, 13% presented a risk of incident and 40% caused an incident in patients.

The process of marketing a medical device, ensuring its quality and safety, must satisfy several cheques regarding the design, manufacture, import, sale purchase and use, before Ministry of Health certification can be obtained.

Conclusions
Claims concerned several categories of medical devices. Abnormalities detected compromise the quality and the safety of our patient care. Checks must take place at all levels of the distribution chain to avoid these risks.

Abstract GRP-112 Table 1

<table>
<thead>
<tr>
<th>Medical devices</th>
<th>Types of claim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catheters</td>
<td>• urinary catheters: too flexible or too rigid, balloon hemia;</td>
</tr>
<tr>
<td></td>
<td>• haemodialysis catheters: thrombogenic, insufficient blood flow;</td>
</tr>
<tr>
<td></td>
<td>• infusion tubes: tube bending.</td>
</tr>
<tr>
<td>Surgical drapes</td>
<td>low impermeability, a blue tint was released in the operating field.</td>
</tr>
<tr>
<td>Gloves</td>
<td>• clean gloves: poorly talc-powdered, low impermeability, break easily;</td>
</tr>
<tr>
<td></td>
<td>• sterile gloves: poor resistance, difficult unpacking in sterile conditions.</td>
</tr>
<tr>
<td>Others</td>
<td>• trocars: mandrel hard to remove, difficult screwing and unscrewing;</td>
</tr>
<tr>
<td></td>
<td>• needles: difficult handling, nonconformity of the tip;</td>
</tr>
<tr>
<td></td>
<td>• sticking plaster: poor adhesion.</td>
</tr>
</tbody>
</table>

No conflict of interest.

GRP-113 MEDICINES HISTORY IN THE CARE PROCESS OF PLANNED SURGERY: A KEY STEP

doi:10.1136/ehjpharm-2013-000276.113

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Background
Since January 2011, pharmacists have been taking medication histories (MHs) both in abdominal and orthopaedic surgery wards. Out of 1400 annual MHs, 40% are for patients whose intervention is planned. During the pre-anaesthesia consultation, the anaesthetics form (AF) is filled out and currently used as reference for post-operative prescriptions.

Purpose
The objective was to assess the concordance between the MH and the AF data in order to find ways of improvement.

Materials and Methods
A five-week prospective study was conducted by two experienced pharmacy students (>100 MHs done by each one). During the medicines reconciliation, the discrepancies were split into two groups: medicines (inappropriate drug, missing or additional medicine, incorrect or omitted dosage) and administration plan (omitted, incorrect or incomplete).

Results
70 patients, involving 272 medicines according to the MH and 223 according to the AF, were included in the survey. Discrepancies were found in 75% of patients. These patients were significantly older and were taking more medicines than the ones without any discordance (69.5 years versus 47.5, 5.3 medicines/patient versus 1.7). Among the discrepancies, 44.9% (n = 122) were due to ‘medicines errors’ with the following breakdown: missing medicine 45% of cases, omitted dosage 38%, medication discontinued 13%, incorrect dose 2%, wrong drug 2%. Regarding the discordances linked to the ‘administration plan’, the plan was omitted, incomplete or incorrect in 47%, 40%, or 15% of cases, respectively.

Conclusions
This demonstrates that the pharmaceutical consultation including MH is mandatory and when done prior to admission can greatly improve the post-operative prescription process. The final step to be done with other healthcare professionals involved (anaesthetists, surgeons, nurses, pharmacy technicians, pharmacists), is to identify the best time to schedule MHs in the whole process.

No conflict of interest.

GRP-114 MEDICINES RECONCILIATION BY THE PHARMACIST AT THE EMERGENCY DEPARTMENT

doi:10.1136/ehjpharm-2013-000276.114


Background
Medicines reconciliation is done to avoid errors in patient treatment such as omissions, duplications, dosing errors, drugs not included in the hospital formulary or drug interactions. Admission to hospital is one of the best times to reconcile medicines for patients with multiple comorbidities.

Purpose
To analyse the pharmacist’s intervention in the medicines reconciliation process in the Emergency Department of a General Hospital.

Materials and Methods
Prospective observational study in the Emergency Department (ED) of a General Hospital in October 2011 to September 2012. We included all patients admitted to the ED of our hospital whose medical orders (MOs) contained a conflict of medicines. When medical or nursing staff detected a conflict they sent the prescriptions to the unit dose drugs distribution system (UDDDS) and the pharmacist checked the drugs taken by the patient upon admission. All pharmaceutical interventions were recorded at the Pharmacy Department.

Results
During the study period 969 MOs were received at the UDDDS and the pharmacist interventions were: 344 (35.5%) exchanged medicines not included in the hospital formulary for other alternatives, 219 (22.6%) exchanged to therapeutic equivalents, 167 (17.2%) exchanged to a brand of the same drug stocked in the hospital, 174 (18%) no alternative dosage forms, 24 (2.5%) interventions for errors in dosing regimen, 17 (1.8%) checked the parental or oral route, 7 (0.7%) prevented duplication of treatment and 17 (1.8%) other interventions.

Conclusions
The role of the pharmacist in medicines reconciliation at patient admission increases coordination between different health care providers and maybe improves the global quality of care.

No conflict of interest.

GRP-115 MEDICINES RECONCILIATION PROCESS AT ADMISSION IN PATIENTS OVER 75 YEARS OF AGE

doi:10.1136/ehjpharm-2013-000276.115

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Background
Elderly patients are likely to be served by different health professionals with the consequent appearance of polypharmacy, increased risk of adverse drug reactions and increased hospital admissions. Therefore, we consider this population candidates for a medicines reconciliation process.

Purpose
To identify the type, frequency and severity of discrepancies between the medicines prescribed during admission and their chronic medicines and to investigate medicines involved in reconciliation errors.

Materials and Methods
Retrospective and descriptive study conducted in a general hospital from November to December 2011. A pharmacist reviewed the treatments 24 hours after hospitalisation, comparing the prescription for medicines sent to the pharmacy with the clinical history and patient interview. Discrepancies were classified according to the consensus document on terminology, classification and assessment of the reconciliation programmes, and severity according to the NCCMERP index.

Results
192 patients were analysed, the median age of patients was 84.3 years (SD: 5.7) of whom 56.3% were women. 98.4% took...