

presentations in the department was implemented: Amoxil (amoxicillin, measuring spoon) and Azimax (azithromycin, dose weight pipette).

Results A total of 77 mothers were included in the study. More than 75% (n=58) showed poor understanding of the intake method when we tried to have them repeat the dosing and administration schedule compared with the medical prescriptions they had. For 75.55% of the 45 mothers with a prescription containing Amoxil, the oral suspension, once reconstituted, was stored at room temperature when it required refrigeration (2–8°C). The response for the preservation of the two drugs after opening the vials was until expiration in 92.20% (n=71), while actually it is 7 days for Amoxil and 5 days for Azimax. Seventy-two interviewees thought that it was possible to exchange graduated pipettes. The Amoxil and Azimax reconstitutions were incorrect in 66.66% (30/45) and 81.25% (26/32) of cases, respectively, with the risk of overdose for Azimax (15/26) and underdosage for Amoxil (19/30). The preparation of the dose was incorrect in 60% of cases when using the dosing spoon with Amoxil and in 84.37% of cases when using the dosing pipette with Azimax.

Conclusion and relevance This study highlights the significant number of errors made by mothers during reconstitution and preparation of drugs, which requires the hospital pharmacist's involvement in educating families on the use of liquid oral forms.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

5PSQ-081 THE BENEFITS–RISKS BALANCE OF LEECH THERAPY IN ONE HOSPITAL: A RETROSPECTIVE STUDY

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Background and importance Venous congestion in transplanted or re-implanted tissues remains a common and challenging complication in reconstructive surgery. Medicinal leeches have been increasingly used for salvage of compromised pedicle flaps and microvascular free tissue transfers. However, leech therapy is associated with a number of risks, including significant blood loss requiring transfusion and infections, as leeches maintain a symbiotic relationship with *Aeromonas* species, which are residents of their gut, in order to digest blood. This bacterial species appears to be the commonest cause of leech related infection and can result in extensive soft tissue infection.¹

Aim and objectives The aim of this study was to assess the benefits–risks of leech therapy. Indeed, in the era of increasing antibiotic resistance, leeches can be vectors of bacteria, harbouring resistance to major antibiotics. Thus we conducted a retrospective study on all patients who received leech therapy in our hospital, from 2010 to 2018.

Material and methods The purchase, maintenance and distribution of leeches in our hospital is centralised in the pharmacy from which the data on the numbers of leeches delivered to the clinical units, names of the patients and the number of leeches used per patient were obtained. We also performed a retrospective survey to assess the conditions of maintenance

and delivery of the leeches in the pharmacy and in the clinical units that used the most leeches.

Results Over 8 years, 42 patients were treated with an average of 34 leeches (5–126) over 2.5 days (1–12). The mean age of the patients was 48 years (34–93). There was a slight male predominance. Leeches were most commonly used by the plastic and reconstructive surgery unit. The success rate of leech therapy was 71.4%. However, 57% of patients developed anaemia, and 16.7% revealed *A hydrophila* infections. All isolates were ticarcillin resistant, three were also fluoroquinolone resistant with one involving an extended spectrum β-lactamase producing one.

Conclusion and relevance In the era of increasing antibiotic resistance and before use of medicinal leeches, prior screening of resistance by a local pharmaceutical team seems logical and necessary.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-082 EVALUATING AN ELECTRONIC CLINICAL DECISION SUPPORT SYSTEM FOR DRUG–DRUG INTERACTIONS IN A LARGE ACUTE TEACHING HOSPITAL

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Background and importance Drug–drug interactions (DDIs) are common and can result in preventable harm. Clinical decision support systems (CDSS) embedded within electronic prescribing software (eg DDI alerting tools) may improve clinical decision making. Studies have shown that prescribers override up to 96% of CDSS alerts and have questioned the usefulness of alerting systems.

Aim and objectives The study's objective was to evaluate the characteristics and override rates of DDI alerts following a recent implementation of a hospital wide electronic prescribing systems incorporating a DDI CDSS which was set to flag 'major contraindicated' drug combinations only.

Material and methods A retrospective analysis of DDI alerts generated by Cerner electronic prescribing software over a 6 week period in a haematology–oncology inpatient cohort was completed. A parallel review of DDIs highlighted by clinical pharmacists in the same patient cohort was undertaken and the results were compared.

Results There were 310 electronic DDI alerts generated. Of these, 58 alerts were redundant as they referred to duplicates within the same prescribing episode (n=22) or were not triggered by current medications (n=36). The remaining 252 alerts involved 38 individual medicines and 44 medication pairs. Antiemetic medications accounted for over 50% of alerts and QTc interval prolongation was the most frequently alerted drug interaction adverse outcome. In 44 instances (17%) either the original prescription or the interacting medicine was changed by the prescriber following the DDI alert, reflecting an override rate of 83% (n=208).

A total of 37 DDI alerts were flagged by clinical pharmacists in the study. There were 42 individual medicines and 37 medication pairs involved. In 5 instances (14%), a change was