

352 A teamwork on a multiregional network: an experience about harmonizing homecare practices for intravenous antibiotic on an implantable catheter port

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In France, there are 49 specialized CF centres. In each one there are coordinating nurses. One of their tasks is to organize the intravenous antibiotic treatment at home for patients, with the homecare nurses. In November 2006, a group of 18 coordinating nurses of the "West French CF Network" was created representing 3 regions and 10 adult or paediatric CF centres for a total of 853 followed up patients. A senior coordinator is responsible for organizing meetings, projects management and reporting, 3 times a year. After an initial meeting, the group has listed various work tracks. The intravenous antibiotic treatment on implantable catheter port (ICP) has been prioritized by voting. A questionnaire survey about the coordinating nurses' care practices was initially conducted. The results showed that no coordinating nurse had the same practices. The common was using syringes ≥ 10 ml on ICP. Therefore, the group decided to create common protocols for the homecare nurses, in light of national guidelines of ICP. This meant for each coordinating nurse to review its own practices of care, to change and organize the change: many discussions during meetings with respect and listening to others, help of a specialist nurse in hygiene and a specialized lab. The protocols have been written and tested. Some homecare nurses have reviewed them and provided feedback. Then protocols have been validated by Cclin (regional specialists in hygiene in health). Today these protocols are implanted in each centre, for the homecare. The change is gradual and easier to set on with the homecare nurses newly trained. To assess the impact of this work, the original investigation will be renewed in 2011.

353 Are elastomeric diffusers delivering what they claim?

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Background: IV antibiotic courses are organized at home with elastomeric diffusers (ED) in our adult CF patients. Many patients have indicated that ED were empty after or before the expected time for the infusion. This may disorganize homecare or increase the risk of venous access devices (VAD) occlusion because nurses cannot flush them on time. The mean flow rate (Q) variance is specified in ISO28620. Q is linked to venous pressure, infusing pressure and hydraulic resistance of the device. An inflatable cuff, made of silicone (Si) or polyisoprene (Pi), is the source of the infusing pressure.

Aim of the study: To compare the brands of ED and to evaluate the performance of 2 types of inflatable cuff at 5, 10 and 200 mL/h. Furthermore tests were repeated with various counter pressures in order to simulate physiological cough. An experimental bench was designed. The volume of water to fill the cuffs respected manufacturer's instructions. The instant Q was measured at regular time intervals until cuffs were emptied.

Results: For cuffs in Pi, instant Qs are close to nominal Q with 2 peaks of over flow, at the start and at the end of infusion time. This last one is followed by a rapid decrease of the flow allowing blood to flow back into VADs. With Si, measured Qs are lower than nominal Q and furthermore decrease constantly. As a result infusion time increases over 50%. The results are in line with hemodynamic laws: one cannot determine Q and pressure together. The specific result of each material is linked to the mechanical properties of each polymer. However, even Si cuff performances remain within the norm. Among ED, the one using Pi for the cuff should be preferred.

354* Associations between treatment non-adherence and beliefs about medicines in cystic fibrosis

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Objective: There is evidence that health beliefs can influence treatment adherence in cystic fibrosis (CF). This work evaluated Horne's Necessity-Concerns Framework. The framework states that treatment adherence is associated with the way in which a person perceives their personal need for a therapy relative to their concerns regarding its adverse effects.

Methods: Participants completed the Beliefs about Medicines Scale (BMS) and a CF Adherence Scale. The BMS generates four attitudinal groups according to how necessary a person believes their therapy to be combined with their degree of concern: Accepting (high necessity, low concerns), Ambivalent (high necessity, high concerns), Sceptical (low necessity, high concerns) and Indifferent (low necessity, low concerns). Clinical and demographic data were also recorded.

Results: 196 adults (45% male) consented to take part in the study. Their mean age and FEV₁ % predicted were 26 years and 60% respectively. 27.6% were categorized as Accepting, 29.6% Ambivalent, 21.4% Sceptical and 21.4% Indifferent. Those who were Accepting were less adherent to oral, nebulised and IV antibiotics than those who were Ambivalent. Those who were Sceptical were also more non-adherent than those who were Ambivalent or Indifferent to oral antibiotics. Similarly for enzymes, vitamins and nutritional supplements those who were either Accepting or Sceptical reported poor adherence. No group differences emerged for other therapies.

Conclusion: Interventions aimed at *intentional* non-adherence need to recognize the ways in which people appraise their personal need for specific treatments relative to their worries and concerns.

355 Reporting of adverse drug effects in adults and children with cystic fibrosis

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Background: As the lifespan of patients with cystic fibrosis (CF) increases so does the incidence of multi-resistant organisms limiting options for optimal antibiotic therapy. We have noted an increased incidence of reported adverse drug reactions further restricting antibiotic choice for some individuals. In response we audited the reporting of all adverse drug reactions within medical notes.

Method: Trust policy dictates that allergies are documented on the front sheet with patient demographics. We looked through 193 (93%) sets of medical notes for information from the front sheet and all places within the notes where adverse reactions might be recorded. The audit included adult and paediatric patients.

Results: 126 (61%) patients overall had incorrect documentation. Frontsheets indicated 19 reactions yet 131 were found within the medical notes. Results were validated against patient understanding using a simple questionnaire and visual chart of drugs with generic and proprietary names. Patients reported side effects that were 'put up with', yet could easily have been managed e.g. nausea and candidiasis. The paediatric questionnaire has identified 31 new adverse reactions. So far significantly more have been identified in the adult population.

Conclusion: Front sheet documentation was not an accurate record of adverse reactions and lacked detail. No clear distinction between allergic reactions and manageable side effects suggests drugs may be excluded unnecessarily. A new data sheet has been devised to document all allergies and side effects to drug therapy with onset dates and details of avoidance or management. The success of this will be reviewed at 6 monthly intervals.