INCIDENCE AND PREVENTION OF NEEDLE STICK INJURY RELATED TO SUBCUTANEOUS INJECTION: EXAMPLE OF THE IMPACT OF A LOW MOLECULAR WEIGHT HEPARIN SAFETY SYRINGE

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While several invasive procedures have been identified as high-risk for blood-borne pathogens contamination, the risk of Needle Stick Injury (NSI) related to subcutaneous needles (SCN) is still underestimated. Nevertheless, NSI after subcutaneous injections (SCI) must be considered as important as they can be an indication for post-exposure prophylaxis (PEP) for HIV prevention and durable follow up in injured health care workers (HCW) resulting in financial consequences. OBJECTIVE: Evaluate the impact of the introduction of a safety syringe for SCI of Low Molecular Weight Heparin (LMWH). METHODS: A prospective multicenter study was conducted in 32 hospitals throughout France from April 1, 1999 to March 3, 2000. All exposures to blood in 1506 voluntary nurses working in medical and intensive care units were actively notified using a standardised questionnaire (GERES). Total number of invasive procedures was measured on a weekly basis. The number of HCW participating and the number of devices purchased were recorded as denominators during the survey period. RESULTS: 184 blood exposures were reported during the study period. Among the 130 NSI, 17 were related to SCI (15%). Six out of 7 were due to LMWH injections. All of these occurred with non-safety syringes. The rate of NSI was 5 for 90,528 ordered LMWH non-safety syringes and 0 for 46,911 safety syringes. One of these NSI occurred with an HCV-infected patient. CONCLUSIONS: NSI related to SCI are relatively frequent in nurses with the extensive use of drugs injected subcutaneously. Despite a low risk of viral contamination through such injuries, such NSI may lead to HIV and HCV follow up, and in some cases PEP. The use of appropriate safety LMWH syringes may help to reduce clinical and economic consequences of these injuries.

ELECTRONIC IMPLEMENTATION OF AN APPROVED TABLET SPLITTING GUIDE WITH PROVIDER ORDER ENTRY—ASSOCIATED COST SAVINGS

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OBJECTIVES: Tablet splitting is utilized as a method of avoiding high costs associated with drug therapy. Our healthcare system encourages tablet splitting of approved medications by patients who are willing and physically able. An analysis was performed to project annual cost savings following electronic implementation of an approved tablet splitting guide. METHODS: A tablet splitting guide was developed to identify appropriate high cost medications for tablet splitting. Tablets with narrow therapeutic range, formulations potentially compromised by splitting, and those difficult to split consistently were excluded from the guide. Providers in our healthcare system enter all medication orders electronically through a computerized patient record system. The database was programmed to default to tablet splitting for the medications and dosages specified in the guide when selected by the provider. For example, if simvastatin 40mg dose were selected, the computer would automatically select the 80mg tablet and incorporate patient instructions to...