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**ePoster Viewing**

**Pharmacoepidemiology, improved prescribing and antibiotic stewardship**

**Tolerance of subcutaneously administrated ceftriaxone. A French prospective multicentre observational study**

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**Background:** Antibiotic administration through subcutaneous (SC) injection is common practice in France, especially with ceftriaxone (CRO). The aim of this study was to determine the tolerance of CRO administrated subcutaneously.

**Material/methods:** This is an ancillary study focusing on CRO use from a large prospective non-interventional multicentre study including every adult patient treated at least one day with SC CRO from May to September 2014 in 50 French hospitals. Data on local adverse effects (AE) and clinical evolution were collected until the end of treatment.

**Results:** 163 patients, median age 86 (19-104), treated with CRO were included. Main indications were urinary [n=78 (48%)] and respiratory [n=45 (28%)] infections. Thirty-three patients (21.5%) experienced at least one AE: pain (n=21, 13%), induration (n=11, 7%), hematoma (n=13, 8%) and erythema (n=5, 3%). No cutaneous necrosis was observed. Local AE were mostly reversible, only one patient had a persistent pain associated with transient hematoma and induration contributing to his transfer from rehabilitation unit to acute yard. An injection > 5 min (p=0.005) and the use of non-rigid catheter (p=0.0021) were protective factors against AE. The use of antithrombotic drugs was not associated with increased AE occurrence. In 137 cases (84%), CRO was successfully injected until the scheduled end. CRO was switched to another more convenient antibiotic in 16 patients (10%). A clinical or bacteriological failure or death were observed in 4% (n=6). AE led to discontinuation of the SC infusion for 4 patients (2%).

**Conclusions:** In a recent report, the European Medicines Agency noticed that data were lacking to recommend a subcutaneous administration of CRO. This original study supports the hypothesis that SC CRO administration may represent an interesting safe alternative to IV route, especially in some

peculiar patient settings, such as elders. However this route needs to be further assessed especially for its efficacy and PK/PD data.