Infectious diseases, vaccines and treatments

Session: Poster Session A

(281) Prevalence and Patterns of Antibiotic Prophylaxis in Kuwaiti Obstetric and Gynaecological Surgery: A National Point Prevalence Survey

Ask

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Location: Convention Hall II

Presenting Author(s)

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Background: Surgical antibiotic prophylaxis (SAP) is prescribed to reduce the prevalence of surgical site infections (SSIs) and is recommended in obstetrics and gynaecological (OB/GYN) surgery such as caesarean section. International guidelines for OB/GYN surgery advocate the use of narrow-spectrum antibiotics for specific surgery to minimise the overuse and misuse of antibiotics, to mitigate the cost and escalation of antimicrobial resistance (AMR). However, the utilisation of SAP and its prevalence in Kuwait's OB/GYN departments have not been established.

Objectives: The study aimed to assess the prevalence and describe the use of SAP in Kuwait in OB/GYN surgery at a national level.

Methods:

Design: A multi-centre point prevalence study guided by the Global point prevalence survey (GPPS) protocol. Setting: five public and four selected private hospitals in Kuwait between December 2022 and March 2023. Participants: All OB/GYN surgical patients admitted during this period were surveyed for SAP usage in the 24 hours prior to surgery. Data collection: Each patient file was checked for SAP. Each ward was surveyed once, and each hospital was completed within 3 weeks. Outcome measure: The primary outcome measure was the prevalence of SAP in OB/GYN surgical patients, both eligible and non-eligible. The secondary outcomes included the quality of SAP prescribing and the frequency of specific antibiotics prescribed.

Results: Of 238 OB/GYN surgical patients, 233 (97.9%) were prescribed SAP. Among them, 215 (90.3%) were eligible for SAP, with 213 (99.1%) receiving SAP, while 23 (9.7%) were non-eligible, with 20 (87%) receiving SAP. A total of 521 antibiotics were prescribed, with the majority (n=490, 94.0%) prescribed to eligible patients. The most commonly prescribed SAP was metronidazole (n=156, 29.9%), cefuroxime (n=123, 23.7%), ceftriaxone (n=97, 18.5%) and co-amoxiclav (n=50, 9.5%). The majority of SAP were prescribed post-operation (n=301, 57.8%), often as ceftriaxone and metronidazole combination (n=69, 29.6%) or cefuroxime and metronidazole (n=52, 22.3%).

Conclusions: The survey showed an extensive reliance on SAP in OB/GYN operations in Kuwait, with a notable overuse in non-eligible patients and a poor quality of prescribing shown by prescribing extended broad-spectrum antibiotics in combination post-operation. These findings highlight the need for robust antimicrobial stewardship programs and policy development to limit unnecessary antibiotic use, thereby enhancing surgical outcomes, controlling AMR growth, and reducing costs.