ABSTRACT

Caesar as a abdominal surgery, is one of the main causes of intraperitoneal (i.p) adhesion that create various medical problems including pelvic pain, bowel obstruction and female infertility. A cat model was used to investigate the effectivity between ampicillin, dextran-40, dexamethasone, and the combination of the drugs to prevent adhesion formation post caesar surgery. Twenty female cats underwent bilateral uterine horn injury as caesar surgery procedure. Study groups were as follows: (A) control group, without therapy; (B) i.p. ampicillin groups, 100 mg ampicillin in 3 ml aqudest was instilled i.p.; (C) i.p. ampicillin plus dextran-40 groups, ampicillin 100mg/3ml plus dextran-40, 20 ml/Kg were given i.p.; (D) i.p. ampicillin plus dexamethasone groups, 100mg/3ml ampicillin i.p. plus dexamethasone 0.2 ml/Kg body weight instilled intra-muscular.; (E) ampicillin, dextran-40, plus dexamethasone groups, ampicillin 100mg/3ml and dextran-40, 20ml/Kg were given i.p. plus dexamethasone 0.2 ml/Kg, intramuscular. The variable that we observed is the wide and the tightness of adhesion formation. The mean rank of wide adhesion formation was follow; 18.13±0.5 in control group, 11.00±0.5 in i.p ampicillin group, 8.00±0.5 in i.p ampicillin and i.p dextran-40 groups, 9.63±1.29 in i.p ampicillin and i.m dexamethasone groups, 5.75±0.96 in i.p ampicillin, i.p dextran-40, and i.m dexamethasone groups. The mean rank of the tightness adhesion formation were follow; 17.75±0.96 in control group, 10.50±0.58 in i.p ampicillin groups. 10.50±0.58 in i.p ampicillin and i.p dextran-40 groups, 9.25±0.96 i.p ampicillin and i.m dexamethasone groups, and 4.50±0.58 in i.p ampicillin, i.p dextran-40, and i.m dexamethasone group. The mean rank was analyzed with Kruskall-Walis and Z test. There is no highly significant showed (p > 0.05) between treatment. The study showed that the combination of ampicillin, dextran-40, and dexamethasone gave the lowest adhesion formation of postoperative in cat uterine horn model.

Keywords: adhesion, ampicillin, dextran, dexamethasone, cat