ABSTRACT

BACKGROUND AND OBJECTIVE:

Incisional hernia is a common complication of abdominal surgery and an important source of morbidity. It is best repaired using mesh either by open or laparoscopic methods. This study analyses the need and efficacy of negative suction drain in open mesh repair of incisional hernia.

METHODS

Between September 2013 and August 2014, 30 patients with incisional hernia who got admitted to Department of Surgery, Madurai Medical College, Government Rajaji hospital were subjected to Chevrel onlay open mesh repair. They were equally segregated into two study arms each containing fifteen subjects. In one arm, Redivac suction drain was used and this was the drain arm. In the other arm, no drain was used during mesh repair and this was the no drain arm. Both the groups were compared regarding postoperative complications such as wound infection, wound seroma, secondary suturing and length of postoperative hospital stay. Data was collected and analysed by various statistical methods.
RESULTS

In the drain arm of 15 subjects, only two patients shown signs of superficial incisional SSI according to CDC criteria which accounts for 13.3% in drain arm. In the no drain arm of 15 subjects, thirteen patients had shown signs of superficial incisional SSI which accounted for 86.7%. In the drain arm, there were no cases of clinical seroma. In the no drain arm, almost all the patients had clinical seroma. In the drain arm, there was no reported case of any secondary suturing. In the no drain arm, about nine patients got secondary suturing done (60%). In the drain arm, the mean postoperative length of hospital stay was about 10.6 days. In the no drain arm, the mean postoperative length of hospital stay was about 19.6 days.

INTERPRETATION AND CONCLUSION

Negative suction drain during open mesh repair of incisional hernia helps in reducing the number of wound infection, preventing the formation of seroma, reducing the number of secondary suturing and decreasing the length of hospital stay.

KEY WORDS:

Incisional hernia; Wound drain; Mesh repair; Complications