A RANDOMISED COMPARATIVE STUDY OF DIATHERMY INCISIONS AND SCALPEL INCISIONS IN SUB ACUTE APPENDICITIS

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ABSTRACT

Introduction: Treating injuries with heat can increase blood flow and make connective tissue more flexible. It can also help minimize inflammation and reduce the incidence of oedema, or fluid retention. By increasing blood flow to the site of an injury, the deep heat generated with diathermy can accelerate healing. Diathermy is used to treat arthritis, back pain, fibromyalgia, muscle spasms, neuralgia, sprains and strains, tenosynovitis, tendonitis, bursitis. In the second, as an adjunct to surgery, diathermy is used to coagulate, prevent excessive bleeding, and seal off traumatized tissues. It is particularly effective in eye surgery, neurosurgery & dermatology. However, there is still not a lot of evidence to prove that diathermy is the most effective treatment for these conditions.

Aim Of The Study: Comparison of Diathermy incision and Scalpel incision in elective open appendectomy surgery.

Materials And Methods: Sample size: 25 patients per group irrespective of sex. Study Group was subdivided into: Study Group A – Patients will be subjected to Diathermy incision. Study Group B – Patients will be subjected to Scalpel incision. After obtaining preanaesthetic check-up patients were posted for surgery. Data was collected using a proforma meeting the objectives of the study.

Results: The treatment group were split into two, Twenty five cases used diathermy for skin incision and the other twenty five cases used traditional scalpel for skin incisions in open appendectomy procedures. 50 patients in the study groups were compared, 4 developed wound gaping which accounts for 8%. Wound gaping is considerably seen in scalpel incision with a highly significant P value of 0.0297 using Pearson-Chi square test. Hypertrophic scar is seen in scalpel incision with significant P value of 0.074 using Pearson-Chi square test. Keloid is considerably seen in scalpel incision with a highly significant P value of 0.0149 using Pearson-Chi square test. The pain in POD-1 was compared, the mean value is 7.44 and 6.16 in scalpel and diathermy respectively, with a high significant P value of <0.0001. The pain in POD-2 was compared, the mean value is 6.28 and 4.72 in scalpel and diathermy respectively, with a high significant P value of <0.0001. Conclusion: All the patients were followed everyday in post operative period till they were discharged. The following parameters were observed, that is comparison of the two procedures with relation to duration of incision, post operative pain, post operative complications in both the procedures. Diathermy is the first choice of incision for open appendectomy procedures as there is less chance of post operative wound complications.

Key Words: Diathermy, Hypertrophic Scar, Appendicitis, Reduced Pain Score