

Original Article

Knowledge, Attitude and Practices of Suturing and Management of Wound among Interns

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ABSTRACT

Injuries in our body can cause the wound. Wound may differ by location and type. Sometime wound can be managed by the medicines and sometimes suturing also included. Suturing can be included in small wound to the emergency trauma patients. If wound is not managed properly, it may causes serious infections which can lead to death of the patients. So wound needs serious assessment and appropriate management. In suturing there are several factors are involving including suture, needle etc., which needs expertise to complete the task. Each and every suture needs experience for the selection of suturing material. The doctors are supposed to be expert in their undergraduate studies. Their internship training is fully dedicated to hands on training in different departments of hospitals. Doctors are learning about suturing and other techniques of medical sciences since their undergraduate studies. Internship training period is the most important period to learn and apply their knowledge because the medical interns are also known as the future doctors. After internship training the medical interns are officially eligible for their individual practices. So it must be a rigorous training in wound management and suturing because emergency and trauma patients can visit any time to the clinic. This study is focused on the knowledge, attitude and practices of suturing and wound management among interns of medical colleges of northern India.

Keywords: Medical Interns, Medical Science, Suturing, Management of Wound, Needle, Suture.

INTRODUCTION

Wound is any injury to the skin or underlying tissues/ organs and breakdown in the protective function with or without loss of underlying connective tissue (i.e. muscle, bone, nerves) ^[1]. If wound is not managed properly, it may causes serious infections which can lead to death

of the patients. So wound needs serious assessment and appropriate management. There are several ways to manage the wounds including the most important is suturing ^[2-5]. Wound assessment by doctor arises question "Will this wound needs stitches?" with the expectation that the answer is determined using some scientific

knowledge. Then the answer is comes with expert opinion and experience ^[1,6].

In suturing there are several factors are involving including suture, needle etc., which needs expertise to complete the task ^[1,7-9]. Each and every suture needs experience for the selection of suturing material. Wound and its healing or management, including from simple cut in skin to the super specialized surgeries. This expertise is not a one day experience or task; it is a long process to get expertise in the field. The doctors are supposed to be expert in their undergraduate studies. Their internship training is fully dedicated to hands on training in different departments of hospitals ^[10]. Doctors are learning about suturing and other techniques of medical sciences since their undergraduate studies. Internship training period is the most important period to learn and apply their knowledge because the medical interns are also known as the future doctors. After internship training the medical interns are officially eligible for their individual practices ^[11]. So it must be a rigorous training in wound management and suturing because emergency and trauma patients can visit any time to the clinic ^[12-17]. Here in this article we focused on the knowledge, attitude and practices of suturing and wound management among interns of medical colleges of northern India.

MATERIALS AND METHODS

Study Area: The study was carried out in the different Medical Colleges of Lucknow City of Uttar Pradesh, India.

Subject: This included 200 medical students who are pursuing their internship training from the medical colleges for fulfillment of MBBS degree. There were 100 girls and 100 boys.

Inclusion criteria: Medical interns should be of MBBS course.

Exclusion criteria: Should have cleared all the examinations of MBBS.

Method of Data Collection: Using the retrospective method, 200 questionnaires were distributed to interns and were properly answered.

The questionnaire included questions about Demographic Characteristic and Perception about wound management, suturing, ideal suture, characteristics of wound healing after suturing, needles, suturing techniques, suture removal.

Statistically Analysis

The results were tabulated, analyzed and percentage calculated.

RESULTS

Demographic Characteristic

Out of the 200 students there were 100 girls and 100 boys in the age group of 19-24 years, 69% (138) were from English medium schools and rest 31% (62) from non English schools.

Perception about wound management

Out of 200 medical interns 170 (85%) were able to define the wound and its management by different medical procedures including medicines and suturing. 25 (12.5%) interns were answering either management by medicine or suturing while remaining 5 (2.5%) interns answered no idea.

Perception about Suturing

Out of 200 medical interns 140 (70%) were able to define the suturing and its application in wound management while remaining 60 (30%) interns were not giving satisfactory answers.

Ideal Suture Selection

Against question about the ideal suture selection out of 200 medical interns 70 (35%) answers properties as sutures have good handling characteristics, not induce significant tissue reaction, allow secure knots, have adequate tensile strength, not cut through tissue, be sterile, be non-electrolytic, be non-allergenic, cheap while the remaining 130 (65%) interns were answering two or three properties given above.

Basic Characteristics of Wound Healing After Suturing

Out of 200 medical interns 120 (60%) answered that a surgical wound never attains the same cutaneous tensile strength as of normal uncut skin, 45 (22.5%) answered that two weeks after suturing, original strength will be achieved while

remaining 35 (17.5) answered that within three weeks the ultimate wound strength is achieved.

Needles

Out of 200 interns 145 (72.5) answered that the needle should be chosen on the basis of its shape, size and cross section while remaining 55 (27.5) answered only shape and size of the needle.

Suturing Techniques

Out of 200 interns 130 (65%) answered that knot tying and different suturing methods (Mattress type) are important, 50 (25%) answered that suturing method is important while remaining 20 (10%) answered that knot tying is important.

Suture Removal

Out of 200 interns, 110 (55%) answered that sutures should be removed within a week (7 days), 30 (15%) answered that should be within two weeks and the remaining interns answered that suture should be removed within 3-5 days.

DISCUSSION

The demographic analysis describes that English medium school students were more interested to participate in study in equal sex ratio^[18]. Interns being known as the future doctors and all interns should have sufficient knowledge about the wound and its management with suturing as it is perception of wound management and suturing were 85% and 70% respectively^[1,12]. The percentage of perception about ideal suture selection and basic characteristics of wound healing after suturing decreases as 35% and 60% respectively^[1,19,20]. While suture selection is the first step towards the suturing and after suturing the perception about the wound healing after suturing can be define all about healing is going on or not by wound's colour and lining^[12,17,19,21]. In same manner all other like needle, suturing techniques and suture removal perception must be 100% among the interns but it was not^[12-20]

CONCLUSION

Medical interns are also known as the future doctors because they are officially permitted to practice individually. They play an important role

in the hospital medical services. In same manner wound management and suturing is used from first aid to the superspecialty surgeries. So each and every intern should have knowledge, attitude and practices towards the wound management and suturing. So for the purpose conferences, workshops and training should be organized by the medical college administration for interns.

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