

Quality of elective inguinal hernia repair at Hadassah Hebrew University Hospital, Jerusalem , Israel

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Summary

Objective:

Invasive operations are a common solution to inguinal hernias in children and adults. In recent years the subjective viewpoint of the patient has gained importance in modern medicine. This has caused the development of a more customer oriented view of treatment in which the patient has very high expectations of the service he is to receive.

The purpose of this study is to determine the quality of service in the Hadassah hospitals for unilateral inguinal hernia surgery, for both procedures themselves and the results. The test was done by comparing the quality and efficiency of the treatment, according to accepted parameters, including quality of life post operation, satisfaction, and the appearance of complications as reported by the primary caregiver.

Method:

The study is descriptive observation based with an analytical dimension of the performance research type and was conducted at the Hadassah hospitals located in Ein Kerem and Har HaTzofim in the Internal Medicine and Children's Internal Medicine wards. The study was conducted between July 2005 and February 2007 on elective patients who were treated for inguinal hernias.

The first part of the study entailed a telephone interview of the patients four to six weeks after the procedure. The telephone interview included questions about the level of pain before and after the procedure, the number of days that analgesic were taken,

number of days to return to work, level of satisfaction, and the presence of any complications from the procedure. The second part of the study entailed additional telephone interviews, approximately one year after the procedure and approximately five years after the procedure. The second set of interviews included questions about patient satisfaction, return to active life, presence of chronic pain, and recurrence of the hernia. Statistics involving the procedure itself and the concurrent hospitalization were taken from the computerized patients records.

Results:

Adult patients one month post op

Satisfaction – 94% reported being satisfied to highly satisfied with the service they received and would recommend Hadassah for the procedure.

Pain – 58% reported some level of pain or discomfort one month after the procedure. Of those 3% reported of above 5 on a one to ten scale. Analgesics were taken for an average of five days following the procedure.

Return to Activity - The average time to return to full activity was ten days. The average time until return to work was fifteen days. Ten percent had not returned to work one month after the procedure. 82% reported an improvement in the hernia symptoms and that the procedure had helped them greatly. Nine percent reported a worsened condition, including patients that had been diagnosed with an asymptomatic hernia before the procedure.

Complications - 11% suffered from post operation infections (based on secretions and/or use of antibiotics). 13 % suffered from hematomas in the area of the procedure. No connection was found between the level of satisfaction and complications, worsening levels of pain, or days to return to activity. A connection was found between satisfaction and the level of pain management during the hospitalization.

Juvenile patients one month post op

Satisfaction – 94% of parents of patients reported high to very high levels of satisfaction with the service and would recommend procedures at Hadassah. A major positive factor was the attitude of the staff towards the patients. A major negative factor was the wait before the procedure and the wait on the day of preparation for the procedure. The quality of the explanation on the preparation day was given an average grade of nine out of ten by the parent or caregiver.

Pain – Nine percent of the children reported some level of pain or discomfort after the procedure. The highest level of pain reported was 4 (out of 10). Analgesics were taken for an average of one day.

Return to activity – Average time to normal activity was three days. Average time to return to school was four days.

Complications – Six percent of children suffered from infections at the site of the procedure (based on secretions and/or antibiotics). Ten percent suffered from hematomas in the area of the procedure.

No connection was found between satisfaction and infections, increased levels of pain post procedure, or the time until return to activity but a connection was found between the appearance of hematoma and level of satisfaction.

Adult patients one and five years post procedure

Satisfaction – One year after the procedure 92% thought that the procedure helped them. 90% thought the procedure had been worthwhile. 89% would repeat the procedure. Five years post procedure 92% thought that the procedure helped them. 90% thought the procedure was worthwhile. 80% would repeat the procedure

Pain – One year post procedure 43% reported some level of pain or discomfort. Of them 30% reported pain above the level 5 (on a scale of 1 – 10) . Five years after the procedure 40% of the patients reported some level of pain or discomfort. Of them 45% reported pain above level 5 (on a scale of 1 -10).

Return to activity – One year post procedure 91% of the patients had returned to regular levels of activity. 86.5% reported that their symptoms improved after the

procedure. Five years post procedure 94% had returned to normal activity.73% reported that their symptoms improved after the procedure.

Complications – Reoccurrence of the hernia was observed in 3% one year after the procedure and in 4% five years after the procedure.

Discussion and Conclusions:

The vast majority of the patients reported high levels of satisfaction. Approximately one tenth of the patients reported chronic pain or a worsening of symptoms one month after the procedure and still had not returned to work. A significant portion of the patients reported pain and/or discomfort one year post procedure and a similar number after five years.

It seem that the rate of complications including infections and reappearance of the hernia was a little higher than, but similar to, the rate reported in the literature. It is important to monitor the rate of complications in order to decrease them as much as possible.

This data should be considered when recommending the procedure to asymptomatic patients, especially in light of new studies which suggest that postponement of the procedure until the onset of symptoms is a safe option for adults. Quality control of the procedure is an important part of the work routine in surgical procedures.