Impact Factor:

ISI (Dubai, UAE) = **0.829 GIF** (Australia) = **0.564** = 1.500

ISRA (India)

JIF

= 3.117

SIS (USA) = 0.912**РИНЦ** (Russia) = **0.156** = 5.015 ESJI (KZ) **SJIF** (Morocco) = **5.667**

ICV (Poland) = 6.630**PIF** (India) = 1.940**IBI** (India) = 4.260

SOI: <u>1.1/TAS</u> DOI: <u>10.15863/TAS</u> International Scientific Journal Theoretical & Applied Science				
p-ISSN: 2308-4944 (print)	e-ISSN: 2409-0085 (online)			

Year: 2018 Issue: 11 Volume: 67

http://T-Science.org Published: 30.11.2018

SECTION 20. Medicine.









Muqadas Habib Dr. WMO at THQ hospital Chishtian, Pakistan muqadashabib3@gmail.com

Afra Ashraf Dr. WMO at THQ hospital Chishtian, Pakistan afraashraf83@gmail.com

Nabila Arshad Dr. WMO at THQ hospital Chishtian, Pakistan nabilaarshad70@gmail.com

FREQUENCY OF WOUND INFECTION AFTER LAPAROTOMY IN **DIFFERENT AGE GROUPS**

Abstract: Objective: To determine prevalence of infection of laparotomy wound in different age groups.

Design and Duration: This is a cross sectional study started in January 2018 and completed in August 2018, comprising on a total duration of 8 months.

Setting: Study was conducted in general surgery unit of a tertiary care hospital Nishtar Hospital Multan.

Patients and Methods: Study was conducted on patients admitted in general surgery ward of study institution. These cases were having different diseases. Investigations were done and diagnosis was established, then laparotomy was planned in these cases. Anesthesia fitness was taken and patients were prepared for surgery properly one night before. After laparotomy wound was examined daily and dressing was changed. Patients were admitted after operation for 7-15 days and wound condition was monitored.

Results: There were total 150 cases included in this study. There were 100 male cases and 50 female cases. Age of these cases was 20-70 years. Minimum age reported was 22 years and maximum age was 68 years. Normal wound was seen in 70 male cases and 30 female cases. Minor wound infection was in 21 male cases and 9 female cases. Major infection was seen in wounds of 9 male and 9 female cases. It was seen that female cases had more frequency of wound infection than male cases.

Conclusion: In old age wound infection is more common than young age because of decreased immunity and poor prognosis of disease. Young patients showed good prognosis.

Key words: Wound infection, Laparotomy, surgical site infection. Language: English

Citation: Habib, M., Ashraf, A., & Arshad, N. (2018). Frequency of wound infection after laparotomy in different age groups. ISJ Theoretical & Applied Science, 11 (67), 324-326. Soi: http://s-o-i.org/1.1/TAS-11-67-55 Doi: croster https://dx.doi.org/10.15863/TAS.2018.11.67.55

Introduction

With advancing age many physical changes occur in the body and all body systems become weak with aging. Immunity decreases in old age so wound infections are common. Such patients show poor prognosis due to increased complications. Laparotomy is done in many diseases. It can be done on emergency basis or elective basis. In our study patients from both male and female populations were included. These cases were of all age groups. It was seen that in adults wound infection was not so common as compared to old patients in which minor and even major infection was noted in laparotmy wound. Study was conducted on patients admitted in general surgery ward of study institution. These cases were having different diseases. There were total 150 cases included in this study. There were 100 male cases and 50 female cases. Age of these cases was 20-70 years. Minimum age reported was 22 years and maximum age was 68 years. Investigations were done and diagnosis was established, then laparotomy was planned in these cases. Anesthesia fitness was taken and patients were prepared for surgery properly one night before.



Impact Factor:

ISRA (India) = 3.117	SIS (USA) $= 0.912$	ICV (Poland)	= 6.630
ISI (Dubai, UAE) = 0.829	РИНЦ (Russia) = 0.156	PIF (India)	= 1.940
GIF (Australia) = 0.564	ESJI (KZ) $= 5.015$	IBI (India)	= 4.260
JIF = 1.500	SJIF (Morocco) = 5.667		

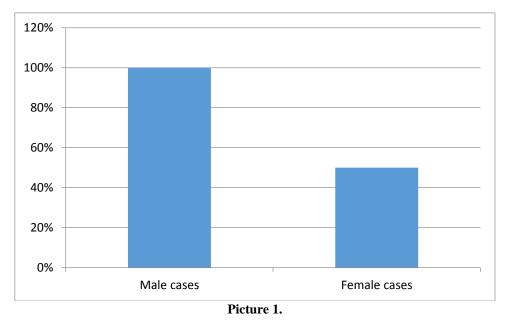
Patients and Methods

This is a cross sectional study conducted in Nishter Hospital Multan, a tertiary care hospital located in a city of Pakistan. Study was completed in duration of eight months. Study was conducted on patients admitted in general surgery ward of study institution. These cases were having different diseases. Investigations were done and diagnosis was established, then laparotomy was planned in these cases. Anesthesia fitness was taken and patients were prepared for surgery properly one night before. After laparotomy wound was examined daily and dressing was changed. Patients were admitted after operation for 7-15 days and wound condition was monitored. There were total 150 cases included in this study. There were 100 male cases and 50 female cases. Age of these cases was 20-70 years. Minimum age reported was 22 years and maximum age was 68 years.

Results

Study was conducted on patients admitted in general surgery ward of study institution. These cases were having different diseases. Investigations were done and diagnosis was established, then laparotomy was planned in these cases. Anesthesia fitness was taken and patients were prepared for surgery properly one night before. There were total 150 cases included in this study. There were 100 male cases and 50 female cases. Age of these cases was 20-70 years. Minimum age reported was 22 years and maximum age was 68 years. Normal wound was seen in 70 male cases and 30 female cases. Minor wound infection was in 21 male cases and 9 female cases. Major infection was seen in wounds of 9 male and 9 female cases. It was seen that female cases had more frequency of wound infection than male cases.

Age of patients (years)	Normal Wound		Minor infection		Major infection	
	Male(N=70)	Female(N=30)	Male(N=21)	Female(N=11)	Male (N=9)	Female(N=9)
20-30	15	6	2	1	1	0
31-40	22	9	5	3	2	3
41-50	10	5	8	1	1	1
51-60	12	7	4	2	2	2
Above 60	11	3	2	4	3	3



Discussion

Laparotomy wounds are large and often get infectected. Body immunity plays main role in

healing of wounds. When healing power of the body is decreased, chances of wound infection increase. With advancing age many physical changes occur in



Impact Factor:	ISRA (India) = IISI (Dubai, UAE) =		= 0.912) = 0.156	ICV (Poland) PIF (India)	= 6.630 = 1.940
	GIF (Australia) = 0 JIF =	ESJI (KZ) SJIF (Morocco)		IBI (India)	= 4.260

the body and all body systems become weak with aging. Immunity decreases in old age so wound infections are common. Such patients show poor due increased complications. prognosis to Laparotomy is done in many diseases. It can be done on emergency basis or elective basis. In our study patients from both male and female populations were included. These cases were of all age groups. It was seen that in adults wound infection was not so common as compared to old patients in which minor and even major infection was noted in laparotmy wound. Study was conducted on patients admitted in general surgery ward of study institution. These cases were having different diseases. There were total 150 cases included in this study. There were 100 male cases and 50 female cases. Age of these cases was 20-70 years. Minimum age reported was 22 years and maximum age was 68 years. Normal wound was seen in 70 male cases and 30 female cases. Minor wound infection was in 21 male cases and 9 female cases. Major infection was seen in wounds of 9 male and 9 female cases. It was seen that female cases had more frequency of wound infection than male cases. This is a cross sectional study conducted in Nishter Hospital Multan, a tertiary care hospital located in a city of Pakistan. Study was completed in duration of eight months. Study was conducted on patients admitted in general surgery ward of study institution.

References:

- Thompson, J. (2004). The peritoneum, omentum, mesentery and retro-peritoneal space. In: Russell RCG, Williams NS, Bulstrode CJK (Eds). Bailey & Love's short practice of surgery. 24th ed. (pp. 1133-1152). London: Arnold.
- 2) Gurlyik, G. (2001). Factors affecting disruption of surgical abdominal incisions in early postoperative period. *Ulus Travma Derg, 7*, 96-99.
- Wong, S. Y., & Kingsnorth, A. N. (2002). Abdominal wound dehiscence and incisional hernia. *Surg Int*, 57, 100-103.
- Yahchouchy-Chouillard, E., Aura, T., Picone, O., Etienne, J. C., & Fingerhut, A. (2003). Incisional hernia related risk factors. *Dig Surg*, 20, 3-9.
- Burger, J. W., Van't Riet, M., & Jeekel, J. (2002). Abdominal incisions: techniques and postoperative complications. *Scand J Surg*, *91*, 315-321.
- 6) Col, C., Soran, A., & Col, M. (1998). Can postoperative abdominal wound dehiscence be predicted? *Tokai J Exp Clin Med*, *23*, 123-127.
- Riov, J. P., Cohen, J. R., & Johnson, H. J. (1992). Factors affecting wound dehiscence. *Am J Surg*, 163, 324-330.
- Wester, C., & Neumayer, L. (2003). Prognostic models of abdominal wound dehiscence after laparotomy. J Surg Res, 109, 130-137.
- 9) Van't Riet, M., Steyerberg, E. W., Nellensteyn, J., Bonjer, H. J., & Jeekel, J. (2002). Metaanalysis of techniques for closure of midline abdominal incisions. *Br J Surg*, 89, 1350-1356.

- 10) Pool, G. V. (1985). Mechanical factors in abdominal wound closure: the prevention of facial dehiscence. *Surgery*, *97*, 631.
- 11) Bucknall, T. E., & Cox, P. J. (1982). Burst abdomen and incisional hernia: a prospective study of 1129 major laparotomies. *Br Med J*, 284, 931.
- Bucknail, T. F., & Ellis, H. (1981). Abdominal wound closure-a comparison of monofilament nylon and polyglycolic acid. *Surgery*, 89, 672.
- 13) SO. Leaper, D. J., & Pollok, A.V. (1977). Abdominal wound closure a trial of nylon, polyglycolic acid steel sutures. *Br J Surg*, 64, 603.
- Lsraelsin, L. A. (1996). Suture technique and wound healing in midline laparotomy incisions. *Eur J Surg*, 160, 605-609.
- 15) Israelson, L. A., & Jonson, T. (1994). Suture length to wound length ratio and healing of midline laparotomy incisions. *BR J Surg*, *81*, 312.
- 16) Grace, R. H., & Cox, S. J. (1973). Incidence of incisional hernia following dehiscence of abdominal wound. *Proc R Soc Med*, 66, 1091-1092.
- 17) Hanif, N., Ijaz, A., Niazi, U. F., Akhtar, I., Zaidi, A.A., & Khan, M. M. (2000). Acute wound failure in emergency and elective laparotomies. *J Coll Physicians Surg Pak*, 11, 23-26.
- 18) Makela, J. T., Kiviniemi, H., & Juvonen, T. (1995). Factors influencing wound healing after midline laparotomy. *Am Surg*, 170, 387-389.
- 19) Cruse, P. J. E. (1975) Incidence of Wound Infection on the Surgical Services. *Surg. Clin. North Am.*, 55, 1269-1275.

