

# Current status of incisional hernia repair in Japan –the first report from the Japanese National Clinical Database– **Hitoshi IDANI<sup>1,3</sup>**, Gen SHIMADA<sup>2,3</sup>, Saseem POUDEL<sup>2,3</sup>, Tatsuya. TAZAKI<sup>3</sup>, Yasuyuki YUASA<sup>3</sup>, Kiyotaka IMAMURA<sup>3</sup>, Kyosuke MIYAZAKI<sup>2</sup>.

<sup>1</sup>Department of Surgery, Izumo Tokushukai Hospital. <sup>2</sup>Hernia Registry Committee,

<sup>3</sup>Incisional Hernia Working Group, The Japanese Hernia Society - Tokyo (Japan)

## Aim

To clarify the current status of incisional hernia repair in Japan.

## Materials and Methods

From data on incisional hernia surgery registered in National Clinical Database (NCD) in 2022, the type of surgery (open, laparoscopic or robot-assisted), age, gender, ASA-PS score, operation time, blood loss, presence of intraoperative blood transfusion, postoperative hospital stays, complications, readmission/ reoperation/death within 30 days after surgery and discharge due to death were extracted.

## Results

	Laparoscopic	Open	Component separation	Total
No of patients	3808	4736	27	8652
No of procedures	3809	4738	27	8574

Table 1.No of patients and procedures

	Types of surgeries		
	Open	Laparoscopic	Robot assisted
No of procedures	4725	3831	18
Men/Women	2070/2655	1660/2171	12/6
Age at surgery median(IQR) ≤69/≥70	74-66-81 1585/3140	73-64-79 1435/2936	70.5-62.5-72.75 9/9

Table 2. Types of surgeries

	Open	Laparoscopic	Robot assisted
Inpatient	4715	3829	18
Outpatient	10	2	0

Table 3. No of inpatient and outpatient surgeries

	Types of surgeries		
	Open	Laparoscopic	Robot assisted
Operation time ( min ) median [IQR]	104.5-68-158	130-91-182	198.5-140.5-353.5
Blood loss (ml) median [IQR]	10-2-55	3-0-8	1.5-0-23.75
Post operative stay median [IQR]	8-6-13	7-5-9	6.5-5-8
No of blood transfusion (%)	112 (2.37)	12(0.31)	1(5.56)
Reoperation within 30 POD (%)	107(2.26)	56(1.47)	1(5.56)
Readmission within 30 POD (%)	117(2.47)	57(1.47)	0
Death within 30 POD (%)	32(0.68)	5(0.13)	0
Discharge due to death (%)	58(1.23)	6(0.16)	1(5.56)

Table 4. Resurst of surgeries

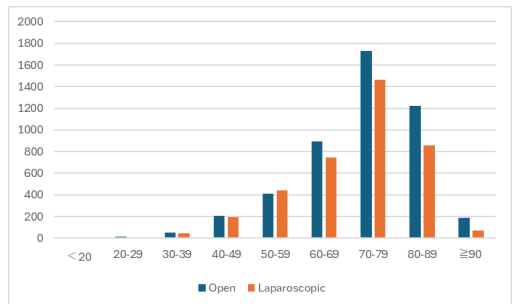


Fig 1. Age at Open and laparoscopic surgery

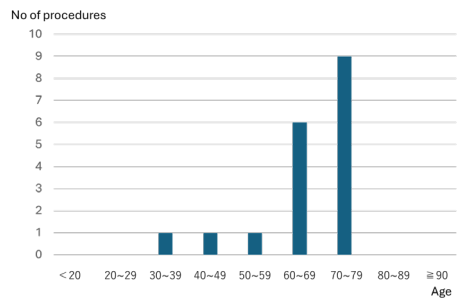


Fig 2. Age at Robot assisted surgery

	Types of surgery		
	Open	Laparoscopic	Robot assisted
Complications Clavien-Dindo(CD)			
No complications	3780	3336	16
Grade I	439	278	1
Grade II	271	126	0
Grade IIIa	114	24	0
Grade IIIb	69	48	1
Grade IVa	18	3	0
Grade IVb	3	2	0
Grade V	29	4	0
Total (%)	943 (20.0)	485 (12.7)	2 (11.1)
CD≥III (%)	233 (4.93)	81 (2.12)	1 (5.56)

Table 5. Complications

## Conclusions

We showed the first NCD data of incisional hernia repair in Japan. Although open surgery seemed to have worse results compared to laparoscopic surgery, it is difficult to compare two procedures since patient characteristics was quite different.

For detailed analysis, more precise registration including classification is necessary.