

349: PROFILING HOSPITAL PERFORMANCE OF LAPAROSCOPIC CHOLECYSTECTOMY BASED ON ADMINISTRATIVE DATA

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Objective:

To compare clinical and economic aspects of laparoscopic cholecystectomy within 7 teaching hospitals

Methods:

Design and Setting: We used a database from the Voluntary Hospitals of Japan Quality Indicator Project that involved 10 teaching hospitals in Japan. We selected surgical cases with laparoscopic cholecystectomy (LC) which admitted to seven of these hospitals.

Subjects: 1895 patients who had laparoscopic cholecystectomy during 1996 to 2001.

Main outcome measures: Clinical indicators: the length of hospital stay (LOS), preoperative LOS, and postoperative LOS, operating time. Medical economic indicators: total hospital fee, which is based on Japan's social insurance payment fee.

Results: as a following table which reveals clinical and economic evaluation

Hospital	1	2	3	4	5	6	
No. of case LC/all chole.	839 89.8%	138 32.9%	339 55.4%	16 59.3%	393 92.3%	43 55.8%	
Hospital fee	7272 3658	9520 3406	6098 3357	4711 833	6659 4240	6564 3609	
LOS	16.5+-12.2	24.9+-11.8	15.9+-13.7	9.7+-3.0	16.4+-17.0	17.2+-14.3	1!
Preoperative LOS	10.9+-10.3	18.9+-10.1	9.2+-10.9	2.8+-1.0	8.2+-10.6	7.6+-10.1	7
Postoperative LOS	6.6+-4.7	7.0+-4.3	7.7+-6.2	7.9+-2.7	9.1+-9.1	9.6+-3.5	8
Operating time	1:22+-0:36	1:33+-0:39	1:49+-0:59	2:10+-0:40	1:55+-0:46	1:46+-0:36	U
Total hospital fee (LOS<=7)	4138 760	3981 101	4051 296	3997 423	4020 31	3683 266	
Total hospital fee (LOS>7)	7567 3634	9544 3300	6164 3446	5016 777	6808 4185	6933 3677	
Operation fee	30397 18031	34245 15356	30263 8453	34315 6430	3456 15520	28093 19451	
Laboratory fee	12018 9279	18972 10266	10364 8234	3386 918	9807 9943	7791 8115	
Injection and prescription fee	6144 12860	10811 14306	4328 12906	2108 797	4185 6056	6322 8615	
Admission fee	22263 14850	33510 17716	23003 17376	14393 4772	24851 19307	15500 15849	

Mean value and standard deviation (SD) in one column; fee in US dollars

a) In hospital 3-10, preoperative LOS was shorter than those of another two hospitals;

b) the proportion of LC to all cases with cholecystectomy was lower;

c) total hospital fee did not reach at 6667 dollars (approximately 800 thousands yen).

d) Additionally, cases with shorter preoperative LOS had small amount of laboratory fee and injection and prescription fee.

e) Hospital A was typical in above mentioned sense.

f) In contrast, preoperative LOS was longer than those of hospital 1 and 2.

g) The proportion of LC to all cholecystectomies in Hospital 1 was high but in hospital 2 was low.

h) Total hospital fee of hospital 1 and 2 were more expensive.

i) Each total hospital fee cases with shorter preoperative LOS(<=7) was almost same within 7 hospitals.

Conclusions:

We suggest as follows:

- a) preoperative total hospital fee attributed to total hospital fee,
- b) and laboratory, and injection and prescription fee attributed to preoperative total hospital fee.
- c) In case with shorter preoperative LOS, laparoscopic cholecystectomy was standardized within these 7 hospitals as an elective surgical procedure with biliary tract diseases.
- d) In hospital 1 and 2, there might have much more cases with acute cholecystitis than another hospitals.
- e) Therefore, we request that these hospitals are obligated to report accurate diagnosis of biliary tract diseases.