



CHAPTER 4

RESULT

This chapter manifests the results of unit cost of DRG for Appendectomy at King Chulalongkorn Memorial Hospital, during October 1,2000 to March 31,2001.

Table 4: Demographic characteristics

Characteristic	Number	Percent
Age group (years)		
Less than 20	25	20.83
21-30	49	40.83
31-40	28	23.33
41-50	7	5.83
51-60	8	6.67
61-70	3	2.50
Mean = 29.93		
Min = 17		
Max =64		
Sex		
Male	56	47
Female	64	53

Table 4 shows the frequency and percentage of the age and the sex of the samples. 120 in-patient medical records of appendicitis patients were enrolled for the study. There were 56 male patients (47% of all) and 64 female patients (53% of all). The ages of the samples were categorized into 6 groups. The majority of the samples were of age between 21-30 years (40.83 % of all) and the average age of the samples was 29.93 years.

Table 5: LOS of samples

LOS (days)	Number	Percent
2	10	8.33
3	87	72.5
4	21	17.5
5	2	1.67
Mode = 3		
Min = 2		
Max = 5		

Table5 shows the LOS of the samples. The LOS of the most case was 3 days (72.5% of all). The mode of LOS also was 3 days. the maximum LOS was 5 days (1.67% of all) and the minimum was 2 days (8.33%of all). The age of all patients who had 5 days of LOS were more than 50 years. The average age of the patients who had 2 days of LOS were 32 years.

Table 6: Operation duration of the samples

Operation duration(minutes)	Number	Percent
30-45	20	16.67
46-60	34	28.33
61-75	41	34.17
76-90	9	7.50
91-105	9	7.50
106-120	7	5.83
Average = 70		
Min = 40		
Max =120		

Table6 shows the operation duration of the samples. The average operation duration was 70 minutes. The maximum duration was 120 minutes and the minimum was 40 minutes.the most operation duration was between 61-75 minutes (34.17% of all). The least operation duration was between 106 -120 minutes.

Table 7: Comparison of anesthetic methods with operation duration

Anesthetic method	Numbers	Operation duration (minutes)	Average operation duration (minutes)
General Anesthesia(GA)	10	60 -120	82
Spinal Block (SB)	110	40 -120	67

Table 7 shows the comparison of the anesthetic methods with the average operation duration used for the sample. There were 10 cases received general anesthesia (GA) method (8.33% of all), their operation duration varied between 60-120 minutes and its average was 82 minutes. There were 110 cases received the spinal block (SB) method (91.67% of all), their operation duration varied between 40-120 minutes and its average was 67 minutes.

The results of the medical care cost

The medical care costs concerning with this study are the cost of the investigations and the cost of the medicines (Table 8 and 9)

Table8: Costs of investigations of samples

Investigation	Unit cost (baht)	Amount (time)	Cases	Total cost (baht)
Laboratory				
Anti HIV	91.15	108	107	20,525.4
Blood group	22.66	1	1	22.66
Bun	19.46	22	22	428.12
Routine CBC	32.03	124	113	3,971.72
Creatinine	14.66	20	20	293.2
Electrolyte	77.04	31	27	2,388.24
Glucose	14.76	13	13	191.88
Appendicial Pathology	100	42	42	4,200
Pregnancy test	26.26	6	6	157.56
PT	30.56	5	5	152.8
PTT	32.14	5	5	160.7
Routine Stool examination	104.30	2	2	208.6
Routine urinalysis	24.33	86	77	2,092.38
Radiology				
Chest x-rays(AP)	571.27	41	41	23,422.07
Ultrasound	1,033.27	2	2	2,066.54
Grand total (baht)				60,281.87
The average cost of investigation(n=120)(baht)				502.35

Table8 shows the costs of the investigations of the samples. The highest cost was the cost of Anti HIV amounted to 20,525.4 baht. The average cost of investigations of the samples was 502.35 baht. From the data, the investigation cost of the samples varied from 64.06 baht to 1,926.62 baht.

Table9: Cost of medicines used for the samples

Medicines' name	Strength	Cases used (case)	Unit cost (baht)	Amounts Used	Total cost (baht)
Injected medicines (vial, amp)					
Cefoxin	1gm	4	181.90	9	1,637.1
Gentamicin	240mg	75	15.9	166	2,639.4
Metrolex	500mg	77	44.67	382	17,063.94
Morphine	10mg	13	8	17	136
Paracetamol	300mg	4	2.9	6	17.4
Pethidine	50mg	81	8	131	1,048
Plasil	10mg	8	4.47	19	84.93
Potassium Chloride	20meq	5	5.74	10	57.4
Zantac	50mg	5	24.40	17	414.8
D-s-w (Piggy Bag)	100ml	2	16.05	2	32.1
Oral medicines (tablet)					
Lorazene	1mg	1	0.45	1	0.45
Metrim	-	16	0.35	132	46.2
Dixocillin	500mg	2	4.1	56	229.6
Gencolax	5mg	4	0.21	4	0.84
FBC	-	1	0.22	4	0.88
Idarac	200mg	5	3.86	28	108.08
Metronidazole	400mg	12	1.12	81	90.72
MTV	-	10	0.40	208	83.2
Norxacin	400mg	4	1.1	30	33
Paracetamol	500mg	108	0.15	1,390	208.5
Xanidine	150mg	1	0.49	1	0.49
Grand Total (baht)					23,933.03
The average cost of medicine (n= 120).(baht)					199.44

Table9 shows the costs of the medicines used for the samples. The most common injected antibiotic used for the sample was Metronidazole and the secondary was Gentamicin, The highest cost was also the cost of Metronidazole amounted to 17,063.94 baht. The average cost of medicines used for the samples was 199.44 baht.

Table 10: Unit cost of RSC of emergency OR. 5 for appendectomy

The unit cost of RSC of OR. PH.P.R. 5 per hour per bed (baht)	Average operation duration of appendectomy (minute)	Unit cost of RSC of OR. PH.P.R. 5 for appendectomy (baht)
5,067.14	70	5,911.66

Table10 shows the result of the unit cost of OR. PH.P.R. 5 for appendectomy was 5,911.66 baht since the average operation duration of all samples was 70 minutes.

Table 11: Unit cost of RSC of emergency OR (OR.PH.P.R.5) for appendectomy related to anesthetic method

Anesthetic methods	Average operation duration of appendectomy	The unit cost of RSC of OR. PH.P.R. 5 per hour per bed (baht)	Unit cost of RSC of OR. PH.P.R. 5 for appendectomy (baht)
GA	82	5,067.14	6,925.09
SB	67		5,658.31

Table11 shows the results of the unit cost of OR. PH.P.R. 5 for appendectomy related to each anesthetic method. The unit cost of OR.PH.P.R. 5 for appendectomy varied from the average operation of each anesthetic method of the samples.

Table 12: Unit cost of RSC of IPD-ordinary surgical wards for appendectomy (AT1= Female, PM1= Male)

Ward	The unit cost of RSC of wards per inpatient day (baht)	Average LOS of appendectomy (days)	The unit cost of RSC of wards of appendectomy (baht)
AT1	2,847.79	3	8,543.37
PM1	3,148.42		9,445.25
Average	2,998.10		8,994.31

Table 12 shows the result of the unit cost of RSC of IPD-ordinary surgical wards of appendectomy. The unit cost of IPD-ordinary female surgical ward of appendectomy was 8,543.37 baht and for male surgical ward was 9,445.25 baht. The average was 8,994.31 baht.

Table 13: Unit cost of DRG of appendectomy

Unit cost of RSC of ward of appendectomy (baht)		Unit cost of RSC of OR. PH.P.R.5 Of appendectomy (baht)	Average MCC for appendectomy		The unit cost of appendectomy (baht)
			Medicine (baht)	Investigation (baht)	
AT1	8,543.37	5,911.66	199.44	502.35	15,156.82
PM1	9,445.25				16,058.70
Average	8,994.31				15,607.76

Table 13 shows the unit cost of DRG for appendectomy of female patient was 15,156.82 baht and for male patient was 16,058.70 baht. The unit cost of DRG for appendectomy was 15,607.76 baht.

Proportion of costs of MCC for appendectomy, unit cost of ward for appendectomy, unit cost of emergency OR for appendectomy are 4%, 62%, 34%, respectively (figure 6).

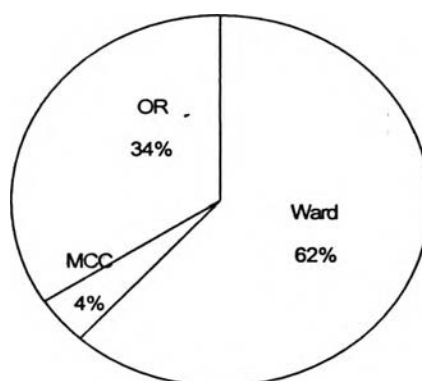


Figure 6: Cost percentage of MCC, unit cost of RSC of ward, unit cost of emergency OR for appendectomy of King Chulalongkorn Memorial Hospital during October 1,2000 to March 31,2001.

Table14: Comparison of unit cost of DRG of appendectomy related to each anesthetic method

Anesthetic method	Unit cost of RSC of OR PH.P.R. 5 for appendectomy (baht)	Average MCC of appendectomy		Unit cost of RSC of ward for appendectomy (baht)	Unit cost Of appendectomy (baht)
		Medicine (baht)	Investigation (baht)		
GA	6,925.09	199.44	502.35	8,994.31	16,621.19
SB	5,658.31				15,354.41

Table 14 shows the comparison of the unit cost of DRG for appendectomy related to each anesthetic method.