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Acute Appendicitis in Pregnant Patients and Non-Pregnant Patients: Recent Clinical Experi-

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Purpose: Acute appendicitis is one of the most common surgical problems in pregnancy requiring emergency surgical intervention. To evaluate the clinical characteristics of surgical emergency in pregnancy, we conducted this study.

Methods: A clinical and pathologic retrospective review was conducted of 42 pregnant and 87 non-pregnant patients who underwent appealectomy with preoperative diagnosis of acute appendicitis at Chonnam National University Hospital from January, to December, 2000.

Results: Thirty-four (81.0%) of the 42 pregnant patients and 75(86.0%) of the 87 non-pregnant patients had pathologically proven acute appendicitis. Among the 34 cases of acute appendicitis in pregnant patients, the gestational stage at presentation was first trimester in 5 (14.7%), second trimester in 23 (67.6%), and third trimester in 6 patients (17.7%). Two instances of combined Caesarian section and 6 of preterm labor or abortion were associated with surgery. Mean eukocyte count was 13,344/mm³ in the pregnant patients and 12,469/mm³ in the non-pregnant patients. Operation time from symptom presentation was 1.90 days in the pregnant patients and 2.70 days in non-pregnant patients. There were some differences between the two groups. Perforation occurred in 4 (11.8%) of the pregnant patients and 13 (17.8%) of the non-pregnant patients. Postoperative wound infection occurred in 9 (26.5%) of the pregnant patients and 11 (14.7%) of the non-pregnant patients.

Conclusion: We concluded that there were more difficulties in the diagnosis of acute appendicitis during pregnancy, and that there were no significant differences in clinical findings except for the location of tendemess. Acute appendicitis in pregnancy was associated with fetal morbidity and more rapid progress. In acute abdomen pregnancy, early suspicion and prompt intervention may prevent maternal and fetal complications. (J Korean Surg Soc 2002;62:486-490)

Key Words: Acute appendicitis, Pregnancy:

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16 43 (28.9) 42 34 (81.0%)

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 7† 15,000/mm³ 7†
 7† (Table 3).

Table 1. Abdominal pain nature

	Pregnant (n=42)				Non-pregnant (n=87)		
	Appendicitis (n=34, 81.0%)				Absent	Appendicitis	Absent
		Trimester		Total	appendicitis (n=8, 19.0%)	(n=75, 86.2%)	appendicitis (n=12, 13.8%)
	1 (n=5)	2 (n=23)	3 (n=6)	(%)			
Abdominal pain						n %	n %
RLQ*	4	13	1	18 (52.9)	4 (25.0)	63 (84.0)	9 (75.0)
BLQ^{\dagger}	0	0	0	0	0	6 (8.0)	1 (8.3)
RMA^{\dagger}	1	7	2	10 (29.4)	4 (75.0)	0	0
Right flank	0	2	0	2 (5.9)	0	0	0
Epigastric	0	1	0	1 (2.9)	0	0	0
Diffuse	0	0	2	2 (5.9)	0	5 (6.7)	2 (16.7)
Periumbillical	0	0	1	1 (2.9)	0	1 (1.3)	0

^{*}RLQ = right lower quadrant; † BLQ = bilateral lower quadrant, † RMA = right middle abdomen.

Table 2. Presenting symptoms in appendicitis

	Fever	Chills	Nausea	Vomiting	Diarrhea
Preagnant (n=34)	2 (5.9)	1 (2.9)	7 (20.6)	8 (23.5)	2 (5.9)
Non-pregnant (n=75)	6 (8.0)	5 (6.7)	20 (26.7)	17 (22.7)	4 (5.3)

⁽P > .05)

Table 3. Physical findings (mean) and white blood cell counts

	Body Temperature	Pulse Rate (/m)	Mean WBC count	< 10,000	10,001 15,000	> 15,000
Pregnant	36 ⁴	84	13,344	6 (17.6)	16 (41.7)	12 (35.3)
Non-pregnant	36 ⁵	84	12,469	18 (24.0)	46 (61.3)	11 (14.7)

	Catarrhal	Suppurative	Gangrenous	Perforated
Pregnant	5 (14.7)	19 (55.9)	6 (17.6)	4 (11.8)
Non-pregnant	11 (14.7)	35 (46.7)	16 (21.3)	13 (17.3)

P > .05

Table 5. Postoperative wound infection

	Pregnant (n=34)	Non-pregnant (n=75)	Total (n=109)
Non-perforated (n=92)	8 (26.7%)	8 (12.7%)	16 (17.4%)
Perforated (n=17)	1 (25.0%)	3 (23.1%)	4 (23.5%)
Total (n=109)	9 (26.5%)	11 (14.7%)	20 (18.3%)

15,000 가가 35.3% (P=.05).

(Table 4). 34 9 (26.5%)

12 (16.0%) , 75 (Table 5).

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(13344 v 12469, P > .05) 15,000/mm³ 가가

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Saunder Milton(14) 3 1991 1 2000 12 가 42 8 85 42 39 34 1. 34 (81.0%), 가 75 (86.2%) 2. 5 (14.7%), 2 8 1 23 (67.6%), 3 6 (17.7%) 3. , 6 가 가 4. . Pederson (15)13,344/mm³ , 가 가 12,469/mm³ . 15,000/mm³ Wein-가 gold(16) 5. 가 , 가 1.90 2.70 가 4 (11.8%), 가 6. 가 13 (17.8%) 7. (26.5%)가 Но Barza (17)11 (14.7%) gentamicin penicillins cephalosporins 가 가 1 cephalosporin 10% 가 (18), 25% .(19) 14.7%, 26.5% 가 가 REFERENCES 가 1) McGee IM. Acute appendicitis in pregnancy. Aust N Z J Obstet Gynecol 1989;29:378-85. .(18) North Am 1987;71:551-60. 가

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