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Acute Aortic Dissection in Prapokklao Hospital

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Abstract **The five years Registry of Acute Aortic Dissection in Prapokklao Hospital**
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Objective : **To assess the presentation, investigation, management, and outcomes of acute Aortic dissection**

Material and Method : **Case series review with patients from January 2003 to December 2007. Data were collected at presentation, and by physician review of hospital records.**

Result : **There were 42 cases of acute aortic dissection, 18 cases (42.8 percent) were type A dissection and 24 cases were type B dissection. The ratio of male : female was 1.8:1 and the mean age was 59.6 year old. The most presenting symptom was acute chest pain (83.3 percent), and initial chest radiography with widened mediastinum was found more often in type A than type B dissection (88.9 percent vs. 58.3 percent, P<0.05). Computed tomography was the initial imaging modality used in 85.7 percent. Of 42 patients with acute aortic dissection, 66.67 percent were managed in Prapokklao Hospital and 33.33 percent were referred to the higher tertiary care hospitals in Bangkok. Overall in-hospital mortality was 53.6 percent.**

Conclusion : **Acute aortic dissection is not uncommon but complications develop rapidly and outcome is often fatal. The typical presentation is acute chest pain with widened mediasternum by chest radiography. The physical examinations are diverse. The imaging modalities are essential and a high clinical index of suspicion is necessary. Despite significant advance in diagnosis and therapeutic techniques, mortality and morbidity rates remain high.**

Key words : **Acute Aortic Dissection, Cardiovascular system.**

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Introduction

Acute Aortic Dissection is a challenging clinical emergency first described by Morgagni more than 200 years ago.[1] This condition is an uncommon but potentially catastrophic illness that occur with an incidence of approximately 2.9/100,000/yr in the Unite states. Early mortality is as high as 1 percent per hour, about 33 percent of patient die within first 24 hours and 50 percent within 48 hours if untreated. The 2 weeks mortality rate approaches 75 percent in patient with undiagnosed ascending aortic dissection.[14] But survival may be significantly improved by the timely institution of appropriate medicine and/or surgical therapy.[2] recently, percutaneous fenestration and/or stent placement have been used in select patient.[3-7] Prompt clinical recognition and definite diagnostic imaging modalities, including computed tomography, transthoracic and/or transesophageal echocardiography are therefore essential in the management of patient with aortic dissection.[8-13]

Aortic dissection is believed to begin with the formation of a tear in the aortic intema or rupture at the vasa vasorum within the aortic media. Blood enters the intima-media space with further propagation of the dissection. Driven by the persistent intraluminal pressure, the dissection progress extends a variable length along the aortic wall, typically antegrade but sometimes retrograde from the site of the intimal tear.[14]

Classification

Classification of aortic dissection is based on anatomical location and time from onset. The 14-day period after onset has been designated the acute phase, because morbidity and mortality rates are highest and surviving patient typically stabilize during this time. Stanford type A is all dissection involving the ascending aortic regardless of the site of origin and type B is not involving the ascending aorta.[14-15] (Figure 1)

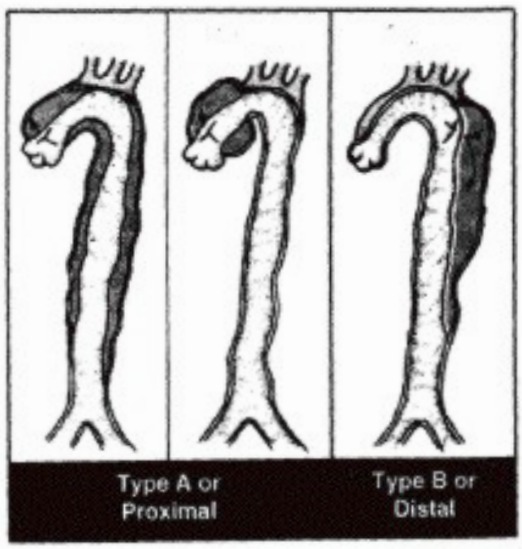

Figure I

Because presenting clinical features are diverse and serious complications occur rapidly, antemortem diagnosis has proven difficult.[16-18] One would predict that the advert of imaging combined with progress in both surgical and non surgical therapy should result in improved outcome.

Little is known about of the clinical characteristic of acute aortic dissection in Propokklao Hospital. Thus we undertook a case-series study to assess the presentations, investigations, managements and outcomes.

Objective

To assess the presentations, investigations, managements, and outcomes of acute Aortic dissection

Material & Methods

All patients with acute aortic dissection in Prapokklao Hospital were reviewed since January 2003 to December 2007. Patients were identified at presentation or by searching hospital discharge diagnosis records, surgical records, computed tomography records and echocardiography laboratory databases.

The patient diagnosis, demographics, history, physical findings, management, imaging studies and outcomes were reviewed and analyzed.

Data analysis was performed using statistical analysis software for descriptive purpose, quantitative variable are presented as mean (SD) value, mode and median. Comparisons between groups were made by using the Chi-square test and Fischer's examination test all significant tests were considered to be statistical significant at $P<0.05$.

Result

There were 54 patients with acute aortic dissection seen at Prapokklao hospital from January 2003 to December 2007. (Figure 2) Twelve of them were excluded due to incomplete medical data therefore 42 patients were analyzed. The ratio of men to women was 1.8:1. The mean age of all patients with acute aortic dissection patients was 59.64 years and the median age was 65 years with SD. 16.23., range 24-83 years respectively. The majority of the patient lived in Chantaburi Province (52 percent) and the others were from our network hospitals. (48 percent), (Table 1). The mean hospital stay was 8.10 days and the median was 6 days, range 1-27 days (Table 1)

Type A dissection was identified in 42.8 percent of patients. The most common underlying disease of all patients with acute aortic dissection was hypertension (64.3 percent) while other underlying diseases were less than 10 percent. But the patients

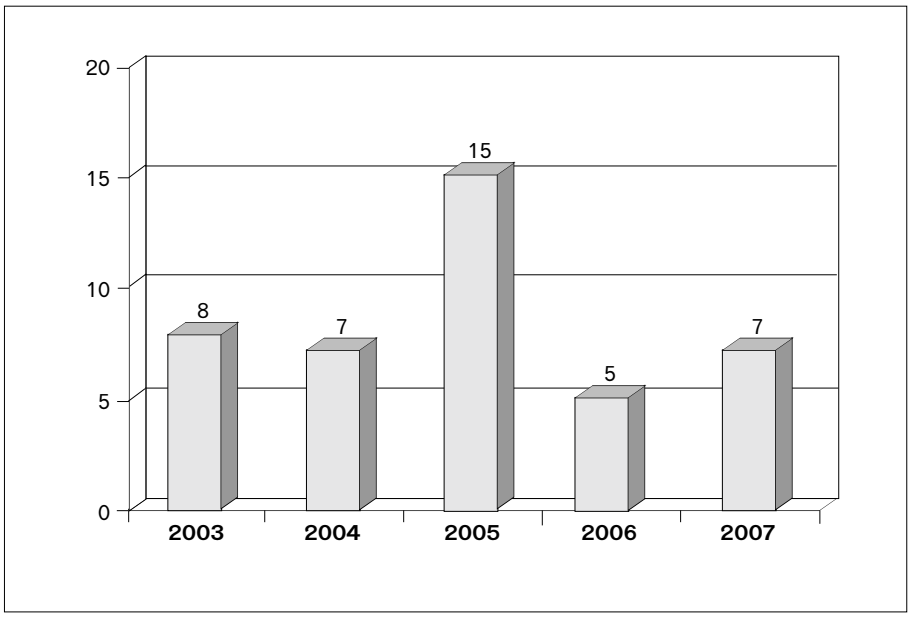

Figure II Number of Acute Aortic Dissection

Table 1 Demographic of patients with acute aortic dissection

Patient characteristic	number
* Patient (n)	42
* Male : Female	27 : 15 (1.8:1)
* Mean/median age (SD)	59.67/65 (16.25) years
min-max	24-83 years
* Mean/Median duration days of admission (SD)	8.10/6 (6.58) days
min-max	1-27 day
* Patient habitat (%)	
Chantaburi	22 (52)
Sakeaw	10 (24)
Trat	6 (14)
Rayong	1 (2)
Prachinburi	1 (2)
Bangkok	1 (2)

with unknown history were 23.8 percent.

Marfan syndrome was present in 2 patients (4.76 percent) of all patients and were type A dissection. The prior treatment with medication was found only 33.3 percent while no prior medication was 66.7 percent in all patients with acute aortic dissection. These were no statistical significance in patient history between dissection type except for the history of prior medication in aspirin and lipid lowering agent. (Table 2)

Table 2 History and Underlying diseases of patient with acute aortic dissection

Category	No (%)	Type A (%) N = 18	Type B (%) N = 24	P-value Type A vs. Type B
Patient History				
Hypertension	27 (64.3)	10(55.6)	17(70.8)	0.31
Diabetes mellitus	4 (9.5)	2(11.1)	2(8.3)	1.00
Valvular heart disease	3 (7.1)	1(5.6)	2(8.3)	1.00
Coronary heart disease	3 (7.1)	0(0)	3(12.5)	0.25
Marfan syndrome	2 (4.7)	2(11.1)	0(0)	0.18

Table 2 History and Underlying diseases of patient with acute aortic dissection (continue)

Category	No (%)	Type A (%) N = 18	Type B (%) N = 24	P-value Type A vs. Type B
Chronic renal failure	3 (7.4)	2(11.1)	1(4.2)	0.57
Dyslipidemia	6 (14.3)	1(5.6)	5(20.8)	0.21
Unknown	10 (23.8)	5(27.8)	5(20.8)	0.72
Prior Medication				
No medication	28 (66.7)	14(77.8)	14(58.3)	0.19
Beta blocker	7 (16.7)	1(5.6)	6(25.0)	0.21
Calcium channel blocker	8 (19.0)	3(16.7)	5(20.8)	1.00
ACEI	4 (9.5)	0(0)	4(16.7)	0.12
Lipid lowering agent	6 (14.3)	0(0)	6(25.0)	0.03*
Warfarin	1 (2.4)	1(5.6)	0(0)	0.43
ASA	6 (14.3)	0(0)	6(25.0)	0.03*

Presenting Symptoms, signs and complications

Severe chest pain with abrupt onset was the most common presenting symptom (83.3 percent) while abdominal pain was more often with type B dissection (58.3 VS 16.7 percent, P<0.05). The congestive heart failure was more often experience in type A dissection than type B dissection (22.2 percent VS 0 percent, P<0.05). Both types of the dissection could be present with abdominal pain, back pain, leg pain, arm pain, syncope, hemoptysis and paraplegia. The patients with acute aortic dissection could present with hypertension (47.6 percent), normotension (23.8 percent) or hypotension (28.6 percent) and did not differ between dissection type. The patient's pulse character could be pulse deficit (33.3 percent), variable heart rate and also did not differ between dissection type (Table 3)

The most common complication of all patients with acute aortic dissection was acute renal failure (35.7 percent). Ruptured of the dissection aorta to free space was found only in type B dissection with hemoperitoneum and hemothorax. (29.2 percent and 25 percent, P<0.05) Pericardial effusion and acute aortic regurgitation were found only in type A dissection (38.9 percent and 22.2 percent, P<0.05)

Initial investigations and Diagnostic Imaging

Chest radiography showed widened mediastinum in 71.4 percent of all patient with more often in type A dissection (88.9 percent VS 58.3 percent, P<0.05) The pleural effusion was found 26.2 percent in all of patient with no differ in dissection

Table 3 Presenting Symptoms, physical examination and complication of patient with Acute Aortic dissection

Category	Present, No (%) N = 42	Type A, No (%) N = 18	Type B, No (%) N = 24	P-value Type A vs. Type B
Presenting Symptoms				
– Arm pain	3 (7.1)	2 (11.1)	1 (4.2)	0.57
– Chest pain	35 (83.3)	15 (83.3)	20 (83.3)	1.00
– Abdominal pain	16 (38.1)	3 (16.7)	14 (58.3)	0.04*
– Back pain	11 (26.2)	2 (11.1)	9 (37.5)	0.08
– Leg pain	4 (9.5)	1 (5.6)	3 (12.5)	0.62
– Syncope	7 (16.7)	3 (16.7)	4 (16.7)	1.00
– Congestive heart failure	4 (9.5)	4 (22.2)	0 (0)	0.03*
– Neuro (paraplegia)	3 (7.1)	1 (5.6)	2 (83)	1.00
– Hemoptysis	2 (4.8)	1 (5.6)	1 (4.2)	1.00
Physical examination finding				
Hypertensive(SBP≥140mmHg)	20 (47.6)	8 (44.4)	12 (50.0)	0.72
Normotension(SBP 90–140 mmHg)	10 (23.8)	4 (22.2)	6 (25.0)	1.00
Hypotensive (SBP≤90 mmHg)	12 (28.6)	6 (33.3)	6 (25.0)	0.55
Pulse deficit	14 (33.3)	8 (44.4)	6 (25.0)	0.19
Tachycardia(HR>100BPM)	4 (9.5)	2 (11.1)	2 (8.3)	1.00
Normal (HR 60–100 BPM)	20 (47.6)	9 (50.0)	11 (45.8)	0.79
Bradycardia (HR<60 BPM)	18 (42.9)	7 (38.9)	11 (45.8)	0.65
Complication				
Paraplegia	3 (7.1)	1 (5.6)	2 (8.3)	1.00
Acute myocardial infarction	1 (2.4)	1 (5.6)	0 (0)	0.43
Acute ranal failure	15 (35.7)	9 (50.0)	6 (25.0)	0.09
Pericardial effusion	7 (16.7)	7 (38.9)	0 (0)	0.001*
Acute aortic regurgitation	4 (9.5)	4 (22.2)	0 (0)	0.03*
Ischemic limb	3 (7.1)	2 (11.1)	1 (4.2)	0.57
Homoptysis	2 (4.8)	1 (5.6)	1 (4.2)	1.00
Free-space rupture				
– Peritoneum	7 (16.7)	0 (0)	7 (29.5)	0.01*
– Hemothorax	6 (14.3)	0 (0)	6 (25.0)	0.05*

type. No displacement of the calcification of aorta was found in both type A and type B dissection. No chest radiography abnormality was note in 26.2 percent of patients. The 12-leads electrocardiography most frequently showed nonspecific abnormalities (45.24 percent) and were normal for 35.7 percent of patient. The cardiac enzymes were elevated in only 2.4 percent by CKMB and 9.5 percent by TnT. (Table 4)

Most patients had multiple imaging studies performed. Computed tomography was most often the initial tool in both type A and type B dissection (88.9 percent, 83.5 percent). The transesophygeal echocardiogram was more often use in type A dissection (44.4 percent VS 16.7 percent, P< 0.05)

Table 4 Chest Radiography, Electrocardiography, Diagnostic imaging Results for patients with Acute Aortic Dissection

Category	No (%) N = 42	Type A, No (%) N = 18	Type B, No (%) N = 24	P-value Type A vs. Type B
Chest X-Ray				
- Normal	11 (26.2)	2 (11.1)	9 (37.5)	0.08
- Widened mediasternum	30 (71.4)	16 (88.9)	14 (58.3)	0.03*
- Pleural effusion	11 (26.2)	5 (27.8)	6 (25.0)	1.00
- Displacement of the calcification of aorta	0 (0)	0 (0)	0 (0)	-
LAB				
- HCT< 30%	6 (14.5)	3 (16.7)	3 (12.5)	1.00
- Cardiac enzyme				
- elevated TnT	4 (9.5)	3 (16.7)	1 (4.2)	0.29
- CKMB > 2 x normal	1 (2.4)	1 (5.6)	0 (0)	0.43
EKG				
- Normal	15 (35.7)	6 (33.3)	9 (37.5)	0.78
- Non specific ST-T change	19 (45.24)	7 (38.9)	12 (50.0)	0.47
- LVH	7 (16.7)	4 (22.2)	3 (12.5)	0.57
- Ischemia	3 (7.1)	2 (11.1)	1 (4.2)	0.44
Echocardiogram				
Transthoracic	30 (71.4)	15 (83.3)	15 (62.5)	0.14
Transesophageal	12 (28.6)	8 (44.4)	4 (16.7)	0.048*
Computed Tomography	36 (85.7)	16 (88.9)	20 (83.3)	0.68

Management and Outcomes

Of 42 patients with acute aortic dissection, 66.67 percent were managed in Prapokklao Hospital and 33.33 percent were referred to the higher tertiary-case hospitals in Bangkok. Among 28 patients in Propokklao Hospital; 9 patients (47.7 percent) were surgically treated and 19 patients were conservative treatment with medication. (Table 5)

Overall in-hospital mortality was 53.6 percent. Highest mortality occurred in patients with type A dissection not receiving surgery (71.4 percent), in contrast to surgically treated patients with type A dissection (50 percent). Patient with type B dissection treated medically still had high mortality (58.3 percent). However mortality for patient with type B dissection who underwent surgery was 28.6 percent. Among the 15 patients who were dead, 8 patients (53.3 percent) died within 48 hours. The patients with type A dissection seem to have higher mortality but not statistically significance. (6.7 percent vs.47.4 percent). When reported, the most common caused of death in type A dissection were cardiac tamponade (66.7 percent). Aortic ruptured which caused homoperitoneum and hemothorax were found in 7 patients (29.2 percent) and 6 patients (25 percent) with type B dissection and were the most common caused of death of this type.

Discussion

Acute aortic dissection may be uncommon, but complications occur often and early, and the outcome is frequently fatal.[16,19-22] The dissection is a dynamic process that may occur anywhere within aorta, the clinical spectrum of presentation is broad. Symptoms may mimic more common disorder such as myocardial ischemia, acute pericarditis and physical finding may be absent or suggestive of a diverse range of other condition.[16,18,22-25] Therefore dissection is often difficult to diagnose, and a high clinical index of suspicion is mandatory. Although clinicians today are better equipped to deal with the mortality rates remain high.

Our patients had chest pain as the presenting symptom for 83.3 percent and were equal in both type A and type B while migratory pain to abdominal, back, arm or leg occurred in 7.1 – 38.1 percent. Syncope occurred in 16.7 percent and of these patients did not have pain. Thus, acute aortic dissection should be considered in differential diagnosis of syncope, even in absence of pain. The presence of syncope predicted an

Table 5 Management and outcome of acute aortic dissection

	Type A (n : 18)			Type B (n : 24)		
	Medical(%)	Surgical(%)	Refer(%)	Medical(%)	Surgical(%)	Refer(%)
จำนวนผู้ป่วย	7(38.9)	2(11.1)	9(50)	12(50)	7(29.1)	5(20.8)
In-hospital mortality	5(71.4)	1(50)	–	7(58.3)	2(28.6)	–
Mortality (%)	**6 (66.7)**		**–**	**9 (47.4)**		**–**

adverse outcome in our study (100 percent mortality). While the physical examination may provide valuable clue to the diagnosis of aortic dissection, typical signs were often absent. For example, pulse deficit, which was previously mentioned up to 30 percent in type A dissection and 15 percent in type B dissection, were recorded 44.4 percent and 25 percent respectively. According to previously recorded the hypertension was found in 30 percent of type A dissection and 70 percent of type B but in our reported were 50.0 percent and 44 percent, the hypotension could be found in both groups.[14,17,22,26] Earlier studies described the value of the abnormal chest radiography findings in the evaluation of suspected aortic dissection.[27] A number of our patient did not have evidence of widened mediasternum. (26.2 percent), but in patients with type A dissection this was always found and more often than type B dissection (88.9 vs. 58.3 percent $P<0.05$)

Differentiating aortic dissection from myocardial ischemia is a common dilemma. Because the treatment strategy is dissimilar. Rapid, accurate diagnosis is essential. The combination of the history, physical exam, electrocardiography, cardiac enzyme and available imaging modality may be helpful.[14,28-29]

Although transesophageal echocardiography is accurate and can be performed quickly at bedside but it has a limitation in detection of dissecting extension especially below descending thoracic aorta.[30] The computed tomography was the most common initial assessment performed. Availability, time delay, restricted ability to monitor patients during imaging are likely explanations for its limited use.

Overall mortality for acute aortic dissection in our hospital is still high in both type A dissection and type B dissection when compared to earlier study. (66.7, 47.4 percent vs. 34.9, 14.9 percent)[22] Only 2 patients of type A dissection were surgically treated. (22.2 percent) and 14 patients of all patients were referred to higher centers in Bangkok.(33.3 percent) This may result from insufficient surgical equipments to deal with the patients with complicated dissection.

This study is the first report of patients with acute aortic dissection in Prapokklao hospital, Chantaburi, Thailand. Our data presents quite small number of patients even during five years review. There are limitations. Many patients may die prior to diagnosis, 12 patients were excluded from this study due to lack of complete recorded data and some data were gathered by chart review.

Conclusion

Acute aortic dissection is not uncommon but complications develop rapidly and outcome is often fatal. The typical presentation is acute chest pain with widened mediastinum by chest radiography. The physical examinations are diverse. The imaging modalities are essential and a high clinical index of suspicion is necessary. Despite significant advance in diagnosis and therapeutic techniques, mortality and morbidity rates remain high.

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ภาวะหลอดเลือดแดงใหญ่แตกเซาะเฉียบพลัน ; ในโรงพยาบาลพระปกเกล้า จันทบุรี

ธันวา พิทักษ์สุธีพงศ์ พ.บ.*

บทคัดย่อ : ภาวะหลอดเลือดแดงใหญ่แตกเซาะเฉียบพลัน; ในโรงพยาบาลพระปกเกล้า จังหวัดจันทบุรี

ภูมิหลัง : ภาวะหลอดเลือดแดงใหญ่แตกเซาะเฉียบพลัน เป็นภาวะฉุกเฉินจำเป็นต้องได้รับการวินิจฉัยและรักษาอย่างเหมาะสมและทันท่วงที แต่ข้อมูลของโรง-พยาบาลพระปกเกล้ายังไม่มีการรวบรวม

วัตถุประสงค์ : เพื่อรวบรวมและวิเคราะห์ข้อมูลของผู้ป่วยภาวะหลอดเลือดแดงใหญ่แตกเซาะเฉียบพลันในแง่ของอาการ อาการแสดง วิธีการรักษาตลอดจนผลการรักษา

วิธีการศึกษา : วิเคราะห์ข้อมูลย้อนหลังของผู้ป่วยภาวะหลอดเลือดแดงใหญ่แตกเซาะเฉียบพลันที่รับมารักษาในโรงพยาบาลพระปกเกล้าจันทบุรีในช่วง 5 ปีที่ผ่าน ระหว่าง 1 มกราคม พ.ศ. 2545 ถึง 31 ธันวาคม พ.ศ. 2550

ผลการศึกษา : ผู้ป่วยภาวะหลอดเลือดแดงใหญ่แตกเซาะเฉียบพลันที่นำมาศึกษาทั้งสิ้น 42 ราย เป็นชนิดแตกเซาะบริเวณส่วนต้นของหลอดเลือดแดงใหญ่ 18 ราย (ร้อยละ 42.8) เป็นชนิดแตกเซาะบริเวณส่วนท้ายของหลอดเลือดแดงใหญ่ 24 ราย (ร้อยละ 57.2) อัตราส่วนเพศชายต่อเพศหญิงเท่ากับ 1.8 ต่อ 1 โดยมีอายุเฉลี่ยเท่ากับ 59.6 ปี ภูมิลำเนาส่วนใหญ่อาศัยอยู่ในจังหวัดจันทบุรี (ร้อยละ 52) โรคความดันโลหิตสูงพบเป็นสาเหตุนำเดิม ร้อยละ 64.3 อาการนำที่สำคัญคือเจ็บหน้าอกเฉียบพลัน (ร้อยละ 83.3) ปวดท้อง (ร้อยละ 38.1) ปวดร้าวไปหลัง (ร้อยละ 26.2) ปวดร้าวไปขา (ร้อยละ 9.5) เป็นลมหมดสติ (ร้อยละ 16.7) ภาวะหัวใจล้มเหลว (ร้อยละ 9.5) การตรวจร่างกายสามารถพบได้ทั้งความดันโลหิตสูง (ร้อยละ 47.6) ความดัน โลหิตต่ำ (ร้อยละ 28.6) และความดันโลหิตปกติ (ร้อยละ 23.8) ส่วนการตรวจชีพจรที่ไม่เท่ากันนั้นพบได้ถึงร้อยละ 33.3 ภาวะแทรกซ้อนที่สำคัญได้แก่ ภาวะไตวายเฉียบพลัน (ร้อยละ 35.7) ภาวะเลือดคั่งในเยื่อหุ้มหัวใจ และลิ้นหัวใจเอออร์ติดรั่วพบเฉพาะหลอดเลือดแดงใหญ่แตกเซาะส่วนต้นเท่านั้น (ร้อยละ 38.9 และร้อยละ 22.2 ตามลำดับ) แต่ภาวะเลือดออกในช่องอกและช่องท้องพบเฉพาะหลอดเลือดแดงใหญ่แตกเซาะส่วนท้ายเท่านั้น (ร้อยละ 25 และร้อยละ 29.2 ตามลำดับ) ภาพรังสีที่ผิดปกตินั้นพบการขยายตัวของเงาช่องอก (mediasternum) ในชนิดแตกเซาะส่วนต้นมากกว่าชนิดส่วนท้าย (ร้อยละ 88.9 และร้อยละ 58.3 ตามลำดับ) ผู้ป่วยทั้งหมดได้รับการการวินิจฉัยด้วยเครื่องเอกซ์เรย์คอมพิวเตอร์ร้อยละ 85.7 ผู้ป่วยที่สงสัยภาวะแตกเซาะในส่วนต้นของหลอดเลือดแดงใหญ่จะได้รับการตรวจด้วยเครื่องตรวจหัวใจโดยคลื่นเสียงความถี่สูงชนิดสอดทางหลอดอาหารมากกว่า (ร้อยละ 44.4 เทียบกับร้อยละ 16.7) อัตราการเสียชีวิตในผู้ป่วยทั้งหมดที่ได้รับการรักษาในโรงพยาบาลพระปกเกล้าพบถึงร้อยละ 53.57 โดยเฉพาะในผู้ป่วยชนิดแตกเซาะส่วนต้น พบเป็นร้อยละ 66.7 ส่วนผู้ป่วยที่แตกเซาะส่วนปลายนั้น เสียชีวิตร้อยละ 47.4 ผู้ป่วย 28 ราย ได้รับการรักษาที่โรงพยาบาลพระปกเกล้า ได้รับการรักษาโดยการผ่าตัด 9 ราย และพบมีอัตราการเสียชีวิตเท่ากับร้อยละ 33.3 โดยผู้ป่วยที่ไม่ได้รับการผ่าตัดมีทั้งสิ้น 19 ราย เสียชีวิตเป็นจำนวน 12 ราย (ร้อยละ 63.3) โดยเฉพาะในผู้ป่วยชนิดแตกเซาะส่วนต้นพบถึงร้อยละ 71.4 และส่วนชนิดแตกเซาะท้ายพบเป็นร้อยละ 58.3 ผู้ป่วยที่จำนวน 14 ราย (ร้อยละ 33.3) ได้รับการส่งต่อไปยังโรงพยาบาลที่มีศักยภาพในการผ่าตัดที่สูงขึ้น

สรุป : ภาวะหลอดเลือดแดงใหญ่แตกเซาะเฉียบพลันเป็นภาวะที่พบได้ไม่บ่อยในโรงพยาบาลพระปกเกล้าจันทบุรี แต่เป็นภาวะที่วินิจฉัยยากและมีอัตรา

ตายสูง เนื่องจากผู้ป่วยมาด้วยอาการและอาการนำที่ไม่แน่นอน จึงจำเป็นต้องอาศัยความช่างสังเกตและคิดถึงภาวะดังกล่าว ตลอดจนการตรวจค้นอย่างรวดเร็ว และดำเนินการรักษาที่เหมาะสม เพื่อลดอัตราการเสียชีวิตของผู้ป่วย

คำสำคัญ : ภาวะหลอดเลือดแดงใหญ่แตกเซาะเฉียบพลัน ระบบหัวใจและหลอดเลือด โรงพยาบาลพระปกเกล้า ประเทศไทย.