Final anatomical diagnosis:

- 1. Aspiration pneumonia, bilateral lung.
- 2. Empyema, right lung.
- 3. Abscess, liver.
- 4. Abscess, prostate.
- 5. Candidiasis, urinary bladder.
- 6. Atherosclerosis, aorta and coronary artery.
- 7. Arterionephrosclerosis, kidney.
- 8. Diverticulum, ileum.
- 9. Erosion, esophagus.
- 10. Accessory spleen.
- 11. Ascites, 200 C.C.

Clinical summary:

This 43-year-old male patient was admitted to our hospital on April. 6, 1996 because of high fever and vomiting for one week. He had history of diabetes mellitus and hypertension for ten years without regular medication.

One month before admission, he had abdominal pain and vomiting. Three weeks later, he was found loss of consciousness on the street. Fever, chills, vomiting and cough were noted at LMD clinics. He was transferred to our hospital for further care.

The vital signs showed 36 °C , HR : 68/min , RR : 28/min , BP : 180/100 MMHG, and ILL-looking. There were no icteric, no jugular vein engorgement and no palpable lymph node. The breathing sound was coarse with bilateral basal rale without wheezing. Abdominal examination showed tenderness over epigastric area. The chest roentgenography showed increased infiltrates over left lung. The KUB revealed bowel gas.

The laboratory examination showed HB: 9.7, MCV: 58.8, platelet: 11300, WBC: 16400, (seg: 78, band: 4), BUN: 69, CR: 2.7, Na: 124, ALK-P: 378, AST: 38, Sugar: 210, bilirubin: 1.1, Ca: 6.6, Albumin: 2.1, urinalysis revealed WBC > 100, SP.G: 1.010, protein: 5MG, glucose: 1.0GM, 2-D heart echo showed adequate LV performance mild MR. The impression during admission was urinary tract infection with sepsis, R/O pneumonia (septic emboli), diabetes mellitus, hypertension and renal insufficiency. Antibiotic such as cefamezin and gentamicin was given. The abdominal echo done on April. 9, three days later after admission, showed liver abscess which was a hypoechoic lesion over segment 5, 3.7 CM with peripheral blurred and hyperechoic RIM. The panendoscopy done on April. 11, showed incomplete studies. The computed tomography of abdomen on April, 12. revealed a right lung lower posterior basal empyema, a 2.0 x 3.0 CM liver abscess at segment 5, and mild bilateral hydroureteronephrosis with distended bladder. During the hospital course, there was fever, diarrhea and ascites with leukocytosis (up to 1800) and anemia. On April. 13, when removing the NG tube, apnea occurred. Resuscitation was done. Ventricular tachycardia was controlled. He was put on mechanical ventilator. The consciousness was E1VEM1. Tapping of empyema showed WBC: 738, L/N: 1/93, Protein (+), RBC: 207, fibrin, and SP. Gravity > 1.027. During the hospital course before death, he was in comatous status. Since April, 17. diarrhea was persistent. On April. 26, he had tachypnea, drop of BP. Twenty four days after admission, he expired on April. 29, 9:30 AM.

Autopsy findings:

(1) Body and external appearance :

The external appearance was wasting.

(2) Body cavities:

| Pleural | Bilateral marked pleural adhesion was found |
|------------|---|
| Peritoneal | Yellow clear fluid 20 C.C. |

(3) Cardiovascular system :

| Greater vascular structures | | |
|-----------------------------|----------------------------|--|
| Cross | Moderate scattered | |
| Gross | Atherosclerosis over aorta | |
| Microscopic Diagnosis | Moderate atherosclerosis | |

| Heart General: | | | |
|-----------------|--------|-----------------|---------|
| Weight | 410 GM | Pulmonary valve | 5.0 CM |
| Left ventricle | 3.0 CM | Mitral valve | 10.0 CM |
| Right ventricle | 1.5 CM | Aortic valve | 4.5 CM |
| Tricuspid valve | 9.0 CM | | |

| Cardiovascular system | Gross | Microscopic Diagnosis |
|-----------------------|-------------------------------|--|
| Valves | Mild fibrosis of aortic valve | Mild fibrosis aorta valve |
| Epicardium | Unremarkable | |
| Myocardium | Unremarkable | |
| Endocardium | Unremarkable | |
| Coronary arteries | Mild atherosclerosis | Mild atherosclerosis, The lumen patency is 85% |

(4) Respiratory system:

| Trachea and major bronchi | | |
|---------------------------|--------------|--|
| Contents | Unremarkable | |

| Lung | | | | |
|--|--|--|--|--|
| Cina | Right | 800 GM | | |
| Size | Left | Left 700 GM | | |
| The right lower lobe has focal empyema measuring 3.0 x 2.5 GM. | | wer lobe has focal empyema measuring 3.0 x 2.5 GM. | | |
| Gross | The left lun | The left lung has pneumonia change. | | |
| Microscopic | Scattered pneumonia change with forging body giant cells aggregates over | | | |
| Diagnosis | bilateral lung and right empyema. | | | |

(5) Gastrointestinal Tract:

| Gastrointestinal Tract | Gross | Microscopic Diagnosis |
|------------------------|--|-----------------------|
| Pharynx | Patent | |
| Esophagus | Focal erosion | Erosion |
| Stomach | Unremarkable | Autolysis mild |
| Duodenum | Unremarkable | |
| Small bowel | There is a ileal diverticulum measuring 2.5 x 1.5 in the mesentery site and location 50 CM to the ileocecal valve. | Diverticulum |
| Large bowel | Unremarkable | Unremarkable |
| Cecum and appendix | Unremarkable | Unremarkable |
| Pancreas | Weight :170 GM Unremarkable | Unremarkable |

(6) Hepatobiliary system:

| Liver | | |
|---|---------|---------|
| Cassa | Weight | 2250 GM |
| Gross Outer surface : An abscess measuring 3.0 x 2.5 CM | | |
| Microscopic Diagnosis | Abscess | |

(7) Hematopoietic-Lymphoid system :

| Spleen | | | |
|-------------|---|--------|--|
| Cmoos | Weight | 200 GM | |
| Gross | An accessory spleen measuring 2.3 CM is found | | |
| Microscopic | Accessory spleen | | |
| Diagnosis | recessory spicen | | |

| Bone marrow | | |
|-------------|---------------------------------|--|
| Microscopic | Cellularity measures M:E=4:1 | |
| Diagnosis | Centilatity ineasures ivi.L=+.1 | |

(8) Urogenital system:

| Urogenital system | Gross | Microscopic Diagnosis |
|---------------------|-----------------|----------------------------------|
| Vidnov | Right: 150 GM | Hyaline arteriosclerosis |
| Kidney | Left: 130GM | |
| Bladder and urethra | | Candidiasis in the muscular wall |
| Prostate / Uterus | Abscess measure | Absongs |
| Testes / Ovaries | 2.0 x 2.0 CM | Abscess |

(9) Endocrine system:

| Endocrine system | Gross | Microscopic Diagnosis |
|------------------|---------------|-----------------------|
| Thymaid | Weight: 48 GM | Unremarkable |
| Thyroid | Unremarkable | |
| Advanala | Right: 11GM | Unnomonirohio |
| Adrenals | Left: 10 GM | Unremarkable |

(10) Central nervous system:

| Shape | The patient's family refuse to take autopsy of the CNS. |
|-------|---|
|-------|---|

Section Taken and Labeled:

| Labeled | Section Taken | Labeled | Section Taken |
|------------------------------|-----------------|----------|------------------|
| AO | Aorta | SP | Spleen |
| H1-4 | Heart | AS | Accessory spleen |
| GI | Gastrointestine | BM | Bone marrow |
| DI | Diverticulum | KR, KL | Kidney |
| APP | Appendix | GU | Bladder |
| PA | Pancreas | TH,TH2 | Thyroid |
| L1-4 | Liver | AR, AL | Adrenal |
| PR, PR1-2 | | Prostate | |
| RL1-5, RM, RU, LU, LU1-2, LL | | Lung | |

Final Comments:

This patient died for respiratory failure. Persistent sepsis caused by empyema, aspiration pneumonia, liver abscess and prostate abscess is direct cause.