MEDICAL GRAND ROUNDS

Parkland Memorial Hospital
November 14, 1963

AMEBIASIS

CASE #1: [redacted]

The patient is a 31-year-old [redacted] man who was admitted to [redacted], 1963, with a history of loose bowel movements since 1957. His illness began as intermittent diarrhea consisting of one to two loose bowel movements per day over a three- to four-day period each month, but this pace gradually increased to the point that he was having three to four loose stools per day. For some three years before admission, small amounts of blood were intermittently present in the stool and on one occasion some three months before admission, he had one grossly bloody bowel movement. He never detected mucous in the stools until a few weeks before admission.

His appetite had remained fairly good throughout his illness, but he had lost some 25 lbs. since the onset of the diarrhea. He was able to carry on his job which required fairly vigorous physical activity and at no time had detected fever or abdominal pain.

Physical examination on admission was felt to be within normal limits. Specifically, there was no abdominal tenderness and the liver was neither palpable nor tender to percussion. His hemoglobin was 13.4 and white count normal. Liver functions including SGOT were within normal limits. Examination of random and purged stools revealed many trophozoites of E. histolytica and proctoscopic exam demonstrated many small mucosal ulcerations thought consistent with amebiasis. Biopsy of one of the latter lesions revealed submucosal edema and a cellular infiltrate consisting predominantly of plasma cells, lymphocytes and occasional eosinophiles. No amebae were identified in the tissue sections. Barium enema revealed an inflammatory lesion of the cecum and ascending colon without involvement of the terminal ileum.

The patient was placed on Milibis and within 48 hours his stools had become formed.. Repeat proctoscopy after four days of therapy showed marked diminution in the number of ulcers present. Chloroquine was added to treat the potential hepatic phase.

He was discharged on therapy and when seen in clinic on [redacted] he was asymptomatic and was having one formed stool per day.

CASE #2: [redacted]

The patient, a 42-year-old [redacted] male, was admitted in [redacted] 1958 with a two-month history of low-grade fever, anorexia, occasional postprandial vomiting and 20-lb. weight loss. Admission physical examination revealed a temperature of 103°, signs of weight loss and small, generalized lymphadenopathy. The remainder of the physical examination was completely within normal limits. Initial lab work revealed a hemoglobin of 7.6, a white count of 28,000 with left shift, normal urinalysis, a 4+ stool guaiac, negative febrile agglutinins, normal electrolytes, albumin of 3.2 with globulin 3.5, and liver battery completely normal with the exception of an alkaline phosphatase of 15 Bodansky units. Chest x-ray revealed equivocal elevation of the right hemidiaphragm with full motility on fluoroscopy. Further evaluation during the first few days

of hospitalization revealed negative blood cultures, normal upper GI series, barium enema, and IVP. A liver scan was performed and thought slightly suggestive of a filling defect over the dorsolateral aspect of the right lobe. Sigmoidoscopy revealed no mucosal lesions, but a smear of mucous obtained was thought to reveal cysts of Endamoeba coli.

On the basis of a presumptive diagnosis of hepatic amebiasis, he was placed on chloroquine and the response is shown below.

Day	1-12	13	14	15	16	17	18	19	20	21	22	23	24	25-34
Temp.	102-103	102	102	100^{8}	101	100^{8}	101	100	101	100^{2}	98	101	99	98
WBC	22-27T				20T				23T				10T	
Drug	0	Chloroquine →												

Repeat liver scan after completion of therapy was normal. He was discharged asymptomatic and initially did well, having no fever, a good appetite and steady weight gain. Approximately a month after discharge he was seen in clinic, having right upper quadrant pain for the first time. Temperature was 101°; there were a few rales at the right base, but the liver was neither palpable nor tender to percussion. Symptoms persisted in varying degrees over the next month despite two courses of antibiotics directed at a presumed pneumonitis. Chloroquine was reinstituted with a fairly prompt suppression of the fever and other symptoms and during the three-week course of therapy his appetite improved and he began to gain weight. Relative well-being continued for about a month after the cessation of therapy before he again developed fever and was readmitted for evaluation. The only abnormality on physical examination was a temperature of 103°. The chest was clear and the liver was neither palpable nor tender to percussion. Additional observations included a white count of 20,000, normal liver function tests, and slightly elevated but mobile right diaphragm. Two purged stools were negative for ova and parasites. Liver scan revealed equivocal thinning at the right margin. Without therapy, the patient became afebrile and asymptomatic in 72 hours and was discharged after five days' further observation. WBC had dropped to 7,000.

He was readmitted one month later with the history that he had done well until five days earlier, when he developed fever and severe pain in his right side. Evaluation revealed rales at the right base, and for the first time tenderness in the right upper quadrant and over the right rib cage. Liver scan was interpreted as definitely abnormal with a defect in the right upper border. Liver biopsy revealed minimal focal cirrhosis. Liver functions were normal with the exception of an alkaline phosphatase of 10.2. Without therapy, he became afebrile on the fifth hospital day but right upper quadrant pain persisted. Following institution of emetine therapy, he underwent laparotomy, at which time a 1500 cc. abscess of the right hepatic lobe was evacuated. Cultures were sterile and smear revealed no amebae. Biopsy of the abscess wall was not done. Recovery was uneventful and following an additional course of chloroquine and diodoquine, the patient was discharged asymptomatic.

CASE #3: [redacted]

The patient was a 57-year-old [redacted] female who was admitted to [redacted] on [redacted]/62 with a history of having had diarrhea associated with cramping abdominal pain and fever for two weeks. Physical examination revealed temperature of 102°, tenderness to fist percussion over the right rib cage, bilateral lower quadrant tenderness, and a large pelvic mass thought to be uterus. Lab revealed a hemoglobin of 8.7 and a white count of 15,000 with left shift. Urine culture revealed E. coli. Electrolytes were normal except for mild hypokalemia. Liver battery was normal with the exception of a thymol turbidity of 9.8. Stool cultures were negative for salmonella and shigella organisms, and several blood cultures were negative. Proctoscopy revealed a small granular-appearing mass at 8 cm., an area at which the bowel mucosa seemed adherent to the pelvic mass. Biopsy specimen of the mucosal lesion was interpreted as acute and chronic inflammation with the comment that several eosinophiles and macrophages were present. IVP revealed right hydronephrosis and partial obstruction of the right ureter, thought due to extrinsic pressure from the pelvic mass. It was felt that the patient had pelvic inflammatory disease, possibly associated with rectal fistula, and after temperature and diarrhea had subsided in the face of antibiotics, she underwent pelvic exploration. Uterus, uterine myomata, tubes, and ovaries were found to be densely bound down in an inflammatory mass with omental and sigmoid adhesions. Salpingo-oophorectomy, hysterectomy and appendectomy were performed and because the sigmoid was entered in dissection of adhesions, a colostomy was performed. Except for low-grade fever, which persisted despite multiple antibiotics, the post-operative course was uneventful. The patient felt subjectively well and had a normal white count at the time of discharge.

The patient was readmitted in [redacted] 1963 for elective closure of her colostomy. At that time she gave a history of anorexia, weight loss and intermittent fever since the last admission. Physical examination revealed a temperature of 101°, clear chest, and a negative abdomen except for mild tenderness around the colostomy. Her hemoglobin was 5.8 compared with the discharge level of 9 gm.%, and a white count was 9,000 with a left shift. Early evaluation revealed a negative chest x-ray, upper GI and barium enema. IVP was thought suggestive of a left renal mass but retrogrades were normal. Liver function tests were normal. Urine culture grew out E. coli; multiple blood cultures were again negative. Fever persisted despite streptomycin and chloramphenicol and during the third hospital week, the patient complained for the first time of right upper quadrant and right chest pain. X-ray revealed elevation of the right hemidiaphragm with overlying discoid atelectasis, but the diaphragmatic leaf moved well on fluoroscopy. A liver scan was interpreted as being consistent with a defect in the dome of the right hepatic lobe and with pneumoperitoneum, no air could be visualized over the dorsolateral aspect of the liver. Using a posterior approach, the intradiaphragmatic area was explored without finding an abscess cavity. Low-grade fever, chest pain persisted despite antibiotics. Three weeks later the patient was re-explored and on this occasion, an intrahepatic abscess of some 1600 cc. volume was entered and evacuated. Smear of the exudate revealed no amebae; culture yielded Proteus vulgaris. Biopsy of the cavity wall was interpreted as showing chronic inflammation. Fever persisted for the next month despite several antibiotics and multiple probings of the abscess cavity to insure drainage. On [redacted]/63 it was noted that necrotic hepatic tissue was issuing from the abscess cavity. Examination of a smear of the material revealed large numbers of trophozoites of E. histolytica. Emetine and diodoquine therapy was instituted without avail and the patient expired one week later.

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