

## CASE I

7 - M - M - 66 - Farmer. 8-15 (50 days) Surgery Neurology

P.H. - Born Norway. Kick by horse in left hip (13 yr). Pneumonia (20 yr.) U.S. (21 yr.) Swelling in left thigh (red, painless) 6 - 9 mo. Sinus (yellow pus) 9 mo. Not much disability. No sequestrae (21 - 22 yr.) Healed spontaneously. Norway (22 - 26 yr.) Pain, weakness, left foot. Typhoid fever (34 yr.) Painless, difficulty in starting urination (60 yr.) Few bladder symptoms. Lump on spine (62 yr.) Pain on pressure. Pain severe (63 yr.) "Rheumatism" - salve, medicine (M.D.) Naturopath (injections with numbness. X-ray. Operation suggested (M.D.) (65 yrs.) Sudden (1 wk) paralysis (bladder, rectum, severe pain downward, spastic lower extremity (adduction!) any stimulus? Cathartics, self-catheterization, opiates?) Pulse in legs?

P.E. - B.F. 118/82. P. 108. T. 97.2. Ht.? Wt.? Pain, emaciation. Senile pupils. Posterior lymphadenopathy. Lungs - brachial breathing. Funnel breast. Harrison's groove. Heart - systolic, apical murmur. Abdomen - fat. Decubitus ulceratib (rt. trochanter) Kyphus (11 D) Slight pain, no protection attitudes. Epidymi tumor (tender) Rectal spincter relaxed. Prostate soft, enlarged, painful. Decubitus left arm. Scar left trochanteric region (sinus) Thighs flexed on abdomen, legs on thighs, spastic (rt. under left) Motor paralysis (lower extremity) Toes dorsiflexed. K.J. 4; A.J. 4. Bab. chad. opp. Plus clonus. K.A. Hyperesthesia (1 - 5 L)  
Diagnosis: Tumor or tb.

Lab. - Urine - pus. Hb 96, rbc 5.2, wbc 10.7, F 60, L 37, E 3. Sp. punct. (block) 110-185 (cough) 10 cells. N-o N-o W-o. Bl. W. o. B.U.N. 8-16 (15.8) 9-6 (23.3) Op spec. bone. X-ray - malig. or tb.

Treat. - Catheterization, urotropin. Am. Cl., M.S., C.S., chloral, Sod. Ac. Phosp. luminol, veronal. Op. - 8-28 (13 day) 1 hr. 18 min. Ethylene (rectal failure) Compression of cord, laminectomy (lateral), fibrous tissue. F.O. - saline, transfusion, glucose. Fair reaction. Decubitus (Dakin's, zinc.) Bradford frame - failure. Proctoclysis. Very uncomfortable. Terminal signs of pneumonia? T septic 97 to 101. P 90 - 120. R - 20 - 60. Death (37 F.O.)

Autopsy - None

Clinical Diagnoses - Group I: (1) Tuberculosis of spine. Group II; (1) Transverse myelitis (2) Laminectomy Additional (3) Cord bladder and rectum (4) Chronic cystitis (5) Decubitus (6) Emaciation (7) Scars (sinus) (8) Broncho-pneumonia? (9) Uremia? (1) Probable hydronephrosis and pyelonephritis?  
Group III: (1) Arteriosclerosis of aorta.

Comment - (1) Adm. 3 days (2) Clerks history (3) Neurological exam. (4) post-treatment history (5) Operative interference Other (1) checked (P E) (2) Study for tb. (3) Neurological check up (P O) (4) Investigation of G U tract (5) Terminal disease (6) Proof of final diagnosis (7) Summary sheet (8) Service. (6) Therapy

## CASE II

W - F - M - 48 - housewife. 9-30 (10 days) Ca. Surg.

P.H. - Primary tumor (benign?) of vulva (3 yrs) Recurrence (5 mo) Metastases to right inguinal (3 mo) Excision, daily radiation (radium & x-ray), severe slough and reaction. Bedridden (3 ), leg pains (1 yr.) weakness (3 mo.) Poor appetite, drowsiness, polyuria, constipation, burning urination. F. H. malignancy? 5 children

P.E. - Drowsy, sthenic, well nourished female, x-ray pigmentation, open wound, edentulous, enlarged tender inguinal glands (mass), few rales at bases, F - 96, abdominal distension, tender liver, right chest and abdomen, cyanosis and clubbing of finger nails, painful tender thighs (more rt.) K.J.s reduced. Vaginal and rectal exam unsat.

Lab. - Urine - many wbc., hayline casts. Hb 82, rbc 4.19, wbc 49.7, F 92, L 6, M 1, E 1. X-ray - ca. metastases to lungs.

Course - Progressive stupor, involuntary, chest findings (dyspnea, rales, no breath sounds) Diagnosis, decubitus, drainage from wound, fluids, no stimulation or

CASE II (cont.)

opiates. T 97.4 - 102 (septic) P 100 - 160 R 18 - 38

Autopsy - None

Clinical diagnoses - Group I: (1) Recurrent carcinoma? of vulva. Group II: (1) Metastases to groin (slough), lungs, liver?, retroperitoneal nodes?, spine? (2) Cystitis? (3) Abs. hydromphrosis? (4) uremia? (5) Bronchopneumonia? (6) Pigmentation. Group III: None

Comment - (1) Attempt information about type of tumor (2) History from relative (3) Post. treat. hist. (4) X-ray of chest. Other (1) Wass., B.F., blood culture, icterus index, neurological (2) Urinary tract investigation (3) Therapy comment (4) Op. on metastases and treatment (5) Terminal illness (6) Summary sheet (primary only) No op.

CASE III

W - M - M - 66 - Trucker (hand) 9-25 (7 days) Surg.

P.H. - Ruptured appendix (13 mo.), slow healing (drainage) Incisional hernia (painful) (9 mo.). Wide belt. Wt. loss, poor appetite, nausea (recent) Dyspnea and palpitation on exertion. Dead - F - rheumatism 63. M - dropsy 63.

P.E. - P-64 R-20 B.P.-136/72. Obese. Sys. mitral murmur. Not enlarged? Incisional hernia muscles (6 in) impulse, viscera (to side of scar) Prostrate 0. Adenoma of thyroid (-13%).

Lab. - Urine 0. Hb 92, rbc 4.72, wbc 5.8, P 62, L 35, E 3. Group I. Negative trachea (x-ray) Very tired.

Oper. - (3 day) 2 hr. 6 min., spinal. Numerous adhesions (broken up) Small bowel to wall. Gallie repair (rt. thigh) F.O. course - nausea, sweat, weak pulse. Fluids (P) abdom. pain. M.S. gas pains, difficulty in voiding (1 day). Abdom. pain., emesis, drowsy (2 day) Nausea, abdom. pain, pulse weak emesis, stuporous, pallor (fluids, gastric lavage, M.S., glucose, digitalin, enema) (3 day) weak, dyspnea, irrational, cyanosis. Therapy?. Death (4 day)

Autopsy - Group I: (1) Incisional hernia (appendix). Group II: (1) Gen. peritonitis (2) Adhesions (3) Acute bronchopneumonia (4) Csw. H.L.K. (5) Left pleuritis (6) Acute splenitis (7) Op. wounds (thigh and abdomen) Group III: (1) Cardiac hypertrophy and dilation (hypertension?) (2) Coronary sclerosis (2) (3) Old pleural adhesions (4) Benign hypertrophy of prostate (5) Absence of appendix.

Comment: (1) investigation of thyroid (2) history OTHER - (1) Wass. (2) Heart (3) Prostate (4) P.E. (check) (5) Terminal illness (uremia?) (chest?) (6) Summary sheet (peritonitis) (7) Terminal therapy (8) Significance of "very tired".

CASE IV

W - M - S - 34 - laborer. 10-8 (29 days) Ca. Surg.

P.H. - Small growth behind left ear (6 - 7 yr) Not a mole? Growth (1-1/2 yr) to angle of jaw and preauricular. Recent pain. Rupture and hemorrhage (1 wk) Health good. Tumor (20x6 cm.) ulcerated, extensions, fixt. hard, and soft.

P.E. - Well dev. and nourished. B.P. 135/80 - 118/70. Sys. at apex. F.H. - apoplexy, pneumonia, cancer?

Lab. - Urine - many wbc. Hb. 101, rbc 5.01, wbc. 8.7, P 78, L 29, M. 3, group II, Wass. 0. Skull plate 0. Chest 0. Heart enlarged?

Diag. - Malig. melanoma, lymphosarcoma, mixt tumor. X-ray treatment (3 day) no change (3 in 4 days 120%) Biopsy 10-31. Op. 11-2 - rectal ether 2-10 min. Resection en bloc, black lymphnodes. Bare to cranium, cut scm. muscle, jugular tied also extricated, post triangle resected. 7-11-12 nerves ant. Wound left open. Death 5 F.O. Dyspnea, expectoration, rales. Condition good cannot swallow. Fluid, duodenal tube, steam, glucose, oxygen, adrenalin. Temp (before op.) 98 to 100 (E 0) 98 to 106. P 60 to 160. R 16 to 68.

CASE IV (Cont.)

Autopsy diagnoses - Group I: (1) Malignant melanoma of neck Group II: (1) Metastasis to neck, liver, spleen, pancreas (2) Op. wound (3) B.P. (4) Csw. (5) Acute lymphadenitis (hilus) Group III: Healed mil. tb. lungs, liver, spleen. (2) Primary tuberculosis of lungs and hilus (3) Pw's. (4) Heart (350)  
Comment: (1) Op. (2) Repeat B.P. 3 adm (1 day) OTHER - (1) history of post treatment (2) family history (cancer) (3) Biopsy (Path.) (4) Summary sheet (extensions, term, illness)

CASE V

W - M - S - 68 - farmer. 9-9 (25 days) Ca. Surg.

P.H. - Mass in neck (rt. (21 mo.) Pres. admission. Aspiration (g - pig O) Derm. exfoliativa. Pain tumor (4 mo. or 16 mo.) Wt. loss 90 lbs. Weakness. Neuro (6 mo) Incontinence of bowel (6 - 7 days movement) Urinary incontinence (better now) 2 x-ray treatments. No results.

P.E. - B.P. 196/124 thick speech, wanders Tumor of neck 8x15 cm. (rt. scm. post) fluctuating (2 small nodes) bilat. pleural effusion? Heart enlarged? Sys. mur. Mass in epigastrium? hard epididymus (cold gc. 7 yrs.) Rectal O. Watch crys. nails. Dry scaly feet and ankles. Eyes: pupils irreg. and small, react to light. Poor movement and convergence. Tongue weak (rt) fibillar twitching, right shoulder girdle. Left arm weak. Hyper K.J. Absent A.J. Bab. chadd. pos. Absent vibration sense in lower extrem. (Farm?)

Lab. - Urine O. Hb. 90, rbc. 4.71, wbc. 7.55, P. 50, L. 43, E 7. Group IV. Spinal fluid 5 cells, Wass. O. Blood same X-ray chronic tb. 6 - 7 cervicals. hyper arthritis. Biopsy - mixt tumor. Deep x-ray treatment, aspir. fluid. Progressive decline. Death.

Treat.:- Cod lum, cascara, zu. ox. fluid. T (6 day) 97 - 104. P 80 - 130 R 18 to 58.

Autopsy diagnosis: - Group I: Mixt tumor of neck Group II: (1) Acute bronchopneumonia (2) Hypertension (3) Cas? (4) Decubitus (5) Chronic cystitis. Group III. None

Comment: - (1) Consultation. OTHER (1) Eye grounds (2) Hypertension (3) Biopsy (4) Summary sheet (5) Autopsy.

## CASE I.

W - F - M - 62 - H. W. 7-4 (116 days) Medicine

Admission - 5 days (R. P.) Hypertension - toxic adenoma

Complaints: (1) anorexia (2) burning urination (3) bloody sputum (4) choking spells (5) constipation (6) dizziness (7) dyspnea (8) diarrhea (9) edema (10) fainting (11) goiter since childhood (12) Headache (13) hypertension (200) (14) insomnia (15) loss of weight - 60# (16) pressure in chest (17) lumbar pain, abdominal pain, and tenderness on pressure (18) prolapse of uterus?, orthopnea (19) "sore throat" (20) vomiting (21) weakness, sick 3 yr. up and down, tonsillectomy!

Examination: Undernourished, dyspneic, cloudy, impaired hearing, senile pupils, arcus senilis, atrophic tongue, dental caries, adenomatous goiter (rt), limited expansion chest, heaving precordium, basal rales, heart to left, extra systoles? fibrillation? soft sys. mur. at apex, P2/A2, liver tender down, edema 3 of lowers

Lab.: Slight albuminuria, few hy. casts, wbc. Blood - 89, 4.52, 10.; P 86 L 13, M 1. B.U.N. 14 - 30 (3). B.M.R. plus 37. ? plus 34, plus 37, plus 46. ?, plus 19 (breathing) Stools positive, negative Benzidine. S P fluid o. Wass o. Sputum o Cl 495, Co<sub>2</sub>58 (-2 days) 3rd stage hypertension, rt. pulmonary infarct? pleural effusion rt? E.k.g. left prepond. bilat. ventricular extrasystoles, delayed I-V. prolonged O. R. S. aborization block.

Consultations: N & M - cardiac psychosis, surg. transfer, ophth - hypertension eye grounds?

Treatment: radium over thyroid (250 mchr.) 3 areas, M.S. digitalis, euphyllin, C. S., luminal (?), bismuth subcarbonate, paregoric, salyrgan, novasurol, ammonium chloride, theophyllin, quinidine sulphate, aspirin (?), bismuth subnitrate, tincture of opii, venesection (20 cc.) boric acid (skin) Lugol's sol. (52 days in hosp.) sodium iodide, digalen, mineral oil, caffeine sodio benzoate, adrenalin, hypodermoclysis, glucose.

Course: Improved for a time (irregularity?) infarct of lung, hot flushed skin, digitalis reactions, persistent diarrhea, convulsions, irrational, friction rubs, retention of urine, B.P. 140/95 to 110/80. T-terminal rise (sharp) occas during stay.

Autopsy: Group I. Hypertension (410). Group II. (1) Myocardial failure (c. p. congestion liver, spleen, kidneys, hydrothorax, edema of back) (2) Infarcts (2) kidney (r) lung (3) Cardiac hypertrophy (LV2) dil (all) 3, (4) Arterio-sclerosis of kidneys (5) Adenoma of thyroid (toxic clinical) (6) Chronic hem. cystitis (7) Hem. of endometrium (8) Fatty liver. Group III: (1) Arteriosclerosis (1) (2) Dental caries (3) Hyaline plaques of heart, liver, spleen (4) Chronic cholecystitis (5) Decubitus (6) Striae (7) Excoriations (8) Petechiae (9) Adhesions of appendix (1) Emphysema of lungs.

Comment: (1) Past history of hypertension from referring physician (2) lab studies (3) Consultations (4) Tumor of abdomen not relieved by catheterization (5) Progress notes (6) Summary sheet. Other - 1. Lugols 2. Digitalis reactions (diagnosis?) 3. N. & M. (diagnosis?) 4. Bladder (diagnosis?) 5. Nomenclature of drugs 6. Diarrhea (diagnosis?)

## CASE II.

W - F - M - 65 - H W. 10-31 (11 days) Surg. Adm. 1 day. Hetzler. Ca. obs.

Complaints: Distress (fatty foods) Pain R.U.". nausea, belching, emesis (30 yr.) Marked biliary colic (18 yr. ago). Attacks milder and intermittent since. Heart trouble, dyspnea, dropsy, palpitation (drops) (15 yr.) another attack (4-1/2 yr.) Cathartics and restricted fluids. Pus kidney (left) colic (left lumbar) to leg and genitalia. Kidney medicine for pyuria (several years) Renal colic every 6 mo. Menopause at 36. Bleeding (severe) every 3 for 4 mo. or 5 years. Packed: Injured left side in fall (recurrence) 8 wks. Abdominal distension, bed ridden, vomiting, constipation, colicky pains (5 wk)

Examination: Obese, edentulous, severe distress, B.P. 170/95, abdominal

distension, gushes, edema of abdominal wall, mass in left side, infiltration of bladder, uterus, enlarged nodular. Diag.: Intest obs. (sigmoid?) G. B. disease, left lithiasis and hydronephrosis, hypertension, pelvic malignancy (abstract N. L. Leven)

Lab.: Urine - alb., pus. Blood - 73, 3.82, 12.6, P 87, L 12, M 1, gr. III. B.U.N. 135, creat. 3.57, Co<sub>2</sub>28. X-ray - massive hydronephrosis (left) mult. renal calculi (left), ureteral calculus (left) gall-stones, prob. intestinal obs.

Treatment: Op. 10-31 - time? Spinocain. Cecum and appendix brought out (catheter), glucose, adrenalin, fluids, hyperventilation, expression, digitalis, nasal tube feeding. Fair response. Op. 11-6 time? Left pyelostomy for uremia (local anesthesia) Op. 11-8 25 min. Cystoscopic, right pyelostomy 11-10 signs if pneumonia. Consultation (Ned) cardiac condition. Other therapy - ms, pituitrin, caff. sod. benzoate, digitalen, digalen, diuretin, oxygen. T 97 - 100 Terminal rise P 125 - 180 - R 16 - 42. Urine - involuntary.

Autopsy: Group I - Multicentric hepatoma Group II - Metastases to lungs, nodes, peritoncum, spleen, culdesac, bladder. (2) Bowel obstruction (recto-sigmoid) (3) Left hydronephrosis and stones (4) Gall-stones (5) Recent right hydronephrosis (6) Cecostomy (7) Bilateral pyelostomy (8) Uremia (clinical) (9) Op. wounds (1) Brown and serous atrophy (11) Edema (1.1.es) Group III - (1) Decubitus (2) Petechia (3) Pus (4) Pigmentation (5) Arteriosclerosis.

Comment: (1) Hist. from relatives (2) Operation interference (3) Lab studies (chlorides?) (4) X-ray obst. (5) Summary sheet (6) Consult. Other (1) Hypertension heart? (2) X-ray of chest (3) Gastric analysis (history sheet) (4) Exact urine output.

### CASE III.

W - M - M - 54 Farmer 11-5 (6 days) Med.

Adm. 1 day (Howard) Hypertension, asthma.

Complaints: Anasarca (3 wk), dyspnea (sev. yrs), orthopnoea, asthma (life) painful burning urination (3 wk), less urine now, headaches, dizziness, "cold", bed, drowsiness (3 wk), Pleurisy (childhood), hoarseness (recent) pneumonia (2 yrs ago). B. F. ? cough.

Exam.: Hypersthenic, back rest, sleepy, acetone odor, cyanosis of lips, dyspnea, dental caries, neck pulsations, dullness and rales in lungs (front) enlarged heart to left, loud sys. murmur at apex, distended abdomen, liver down, fluid, edema of genitalia and legs, rectal o, reflexes o, B.P. 150/110. Consultation: Paralysis left vocal cord, hypertension grounds, dental, cardiac failure (2 yrs ago) Flu.

Lab.: Albuminuria, casts. Blood 99, 5.64, 18.4, P 80, L 19, B 1, B.U.N. 84, creat. 1.84, Co<sub>2</sub> 40. X-ray - marked cardiac enlargement. B. F. fluid congestion.

Treatment: Mag. sulph. ammonium chloride, atropine sulphate, digitalis (4 day) m.s. adrenalin, restricted fluid, dry diet. Course - urine 300 - 700 - 1300 - 1025. Irrational. Died. B.P. 116/80. T. 97-99. P. 80 - 100. R 18 - 22.

Autopsy: Group I - Hypertension. Group II - (1) Cardiac hypertrophy and dilation (550) (2) Thrombosis of rt. auricle (3) Hydrothorax ascities (4) Generalized edema (5) C.p. congestion of lungs, spleen, liver, kidneys (6) Bronchopneumonia (7) Arteriosclerosis of kidneys Group III - (1) Cholesterosis of gall-bladder (2) pus (3) Gen. arteriosclerosis (4) Left pleural adhesions.

Comment: (1) History (2) Lab. (3) Consultations (4) Digitalis? Other "Nephritis with edema".

CASE IV.

W - F - G - schoolgirl. 10-30 (4 days) Ped.

Autopsy: Group I. - Lymphatic leukemia (subacute) (liver, spleen, marrow)  
Blood 18 - 1.05, wbc 3200, P. 14, L 86, Immature. Group II. - (1) Enlargement of spleen, liver, lymphnodes (2) Anemia (3) Hydrothorax, pericardium, peritoneum (gr. 1) 4. Toxic myocardium (5) Fatty liver (6) Cong. of lungs (7) Edema of face (8) Tumors of marrow. Group III - (1) FWS (2) Transfusion scar (3) Colloid goiter (4) Chronic bronchiectasis? (left?) (5) Artherosclerosis (6) Congestion of bladder (7) Cystic ovaries (8) Chronic sinusitis?

Comment: (1) Laboratory diagnosis (2) Radiotherapy Other: (1) Sinus studies (2) Record

CASE V.

W - F - 18 - factory worker. 9-26 (48 days) Med.

Adm. Neurological Disp. (Ref. out of town)

Autopsy: - Group I - Hypertension ( ) 218/134 (cranial) Group II - (1) Arteriosclerosis of kidney (renal insufficiency (2) Hypoplasia of rt. kidney (3) C sw of the heart, liver, kidneys (4) Mild arteriosclerosis (5) Constitutional type? Group III. (1) Pus.

Comment: (1) Record (2) Attempted therapy (3) N. & M. clinic Other: (1) Type (2) Eye ground terminology (3) Gen. Medical Clinic

SUGGESTIONS FOR BETTER SERVICE

1. Take relatives of deceased to first room east of Mr. Fesler's office (committee room) for interview. (Dr. R. Jolin).

2. When interne is called to interview relatives get in touch with staff man at once for help (day or night) if there is any difficulty (Dr. Richard Johnson).

3. Schedule house cases for basal metabolism first on the list. They can be brought to the laboratory at 7:45 A.M. by the floor nurses and put in bed. They will be ready for test when technician arrives. Temperature, pulse, ht., and wt. can be taken after test. (Dr. Karl W. Anderson)

4. Post absences from service on bulletin board in staff room or switchboard (Dr. Henry Michelson)

5. Dictate results of autopsy at once without waiting to abstract history. Copy to physician at once without history. Will also aid in completing diagnoses on summary sheet (Lab.)

6. Promise of result of autopsy to family to be written on permit. (Lab.)

7. Small pieces of tissue will continue to be cut in paraffin. If material is insufficient, no diagnosis can be made. (Lab.)

8. Nurse to record on chart name of clinician and student doing pelvic examinations. This will do away with exaggeration about number of students examining patients. (loyal alumnus).

9. Record height, weight, and blood pressure of every patient on admission and at regular intervals thereafter, depending on service (one who tried to study our records).

10. An outpatient refuses to return to the University Hospitals because

we refused to examine her sternum when she complained about it. She now has a definite fluctuating mass at the place. Moral! (staff man)

#### ANNOUNCEMENTS

1. Copy of "Professional Standing Orders" by American Hospital Association has been placed in "Mail Room" for consultation. Perhaps you can get some ideas on routine orders (adm)
2. Special meeting of entire staff (in and out-patient) to be held probably this month to discuss records. Dr. Hal Dunn, Mayo Clinic, has been invited to spend a day going over our problem and to address us in the evening. Date to be announced when Dr. Dunn accepts.
3. The University Hospitals interne service has been changed from 12 to 18 months. Discussion wanted.
4. The Internes Society of the University Hospitals is planning a clinical meeting to be held in the Eustis Amphitheater in the near future. All the internes of the Twin Cities are to be invited. Date to be announced.
5. Wanted! Books, magazines, radio for the internes quarters. Suggestions will be received for financing the radio purchase. Cost about \$135.
6. The American College of Physicians will meet in Minneapolis Feb. 11 - 12 - 13 - 14, 1930. In addition to the regular program at the Auditorium in the afternoon and evening, clinics and demonstrations will be held in the hospitals of Minneapolis. More than seventy clinics and demonstrations have been scheduled for the Anatomy, Todd, and Eustis amphitheatres by the committee in charge. An attempt has been made to present a cross section of University activities, not only in Internal Medicine, but in all related fields. If you have been asked to present something start now to arrange your material. The program has gone to the printer so that the clinic tickets can be issued ahead of the meetings. 1500 visitors are expected and it is the earnest desire of the committee that everyone put forth a special effort to make our part an outstanding success.
7. Dr. A. D. Hirschfelder is interested in statistical studies on the effect of drug therapy on patients. How many times do the bowels move after a dose of magnesium sulphate? When is the first effect? the last? Does collapse ever occur? How often? When? This and many other studies can be made when "we go statistical".

#### QUESTIONS

1. Who is liable for malpractice at the University Hospitals? Hospital, staff man, fellow, or interne? Answer!
2. What is the new post call? Answer. "All staff men, internes, clerks report to the Todd Amphitheater". The fraternity houses, medical school, and anyone leaving name with telephone operator are also called.

## Gastric Cancer (abstract)

Dwyer, Blackford, and Turner

J. A. M. A. 93: 1456 (Nov) 1929

I. Problem: Stomach affected more with cancer than any other organ, few cures, only surgical treatment, early diagnosis is essential.

II. 3000 Consecutive gastro-intestinal x-ray exams: 450 (15%) organic lesions, Duodenal ulcer (295), gastric cancer (92), gastric ulcer (57), syphilis (2), benign tumors (3), hairball (1), 3.6% are ca. Ratio: D.U. 5; ca. 2; G.U. 1

III. Early Signs: 100 Cases: 1. Localized gastric symptoms (distress, pain soreness, pressure) (62%) 2. Not referred to stomach (23%) 3. Vomiting and anorexia (15%) 4. Loss of weight and strength (5%) 5. Dysphagia (2%) 6. Diarrhea (1%).

IV. Late Signs 100 cases: 1. Constant discomfort 2. Food distress 3. Distaste for food 4. Loss of weight 5. Nausea and vomiting 6. Hematemesis and anemia. Analysis - weight loss not considered important by patient (80%) 75% = 20+ lbs. some enormous, 79 more than a ton (30 lbs. a patient) Nausea and vomiting (+50%) Hematemesis (11%; 2% considered it important) Loss of strength and appetite (33%) Gastric mass (6% complained; found in 41%). Hb 70- (25%)

V. <u>Groups</u>	A. (62%)	B. (38%)
Prev. gastric history	None	10 yr. dyspepsia
Onset	Insidious	fused
Progress	rapid	slower?
Duration	8 mo.	?
Free Hcl	None; trace (2)	70% pos.
Large filling defect	Yes	ulcer?
Pyloric	44% (+70%)	83% (+56%)
Body	38%	17%
Cardiac	18%	0%

+Friedenwald, Bryan; Hartman (no relation)

VI. Age - 68% 50-70 yrs. Sex - males 78%

### CASE I

W - M - M - 58 yr. - farmer. 10-29 (17 days) Med. (6 days) Ca. Surg (11 days) Adm. 1 day. Carcinoma of stomach (Hetzler)  
Complaints: Onset: flatulence, belching (3 yr). epigastric pain, belching (2 yr.) Patent medicine (1 yr.) vomiting (occas to constant) 1/2 to 3 hrs. p.c. constipation, weakness, dyspnoea on exertion, worked occasionally, wt. loss (23 lbs.) (1 yr.). Liquids, cereals, egg nogs. Shooting pains on lifting. M. D. #1 saw him 7 mo. ago - "Too much gastric juice". Gave prescription. M. D. #2 - X-ray "No gastric juice". Treatment? (4 mo.) 1 mo. ago new medicine, stopped vomiting. Pertusis (child), pneumonia '83, cauterized hemorrhoids '27, loss right rt eye (steel) 35 yr.; nocturia (2 wk) .  
F. H. Tuberculosis (mother, sister) No ca.

Examination: Weakness, blind (rt eye), edentulous, no Vichow's node, impaired resonance, B.V. breathing spics, B.P. 120-72, hard epigastric mass (tender, spasm) No rectal shelf, reflexes 0.

Lab.: Urine 0, blood 68, 3.71, 5.8, P 80, L 18, E 2. Hypo. aniso, poik, gastric free 0, total 72, lactic pos. Group II. B U N 16.8. Hist: F-0, T-32. Blood pl. 346. Wass ? Ekg 0. X-ray - ca. of stomach, prob. operable, ulceration, slight obstruction, Chest 0.



Course: Vomiting, weak, lavage, fluids?

Operation: 11-6 (8 day) Resection of ca. of stomach, mesocolon, transverse colon. end to end colonic anastomosis, anterior Polya. Transfusion 700 cc. No reaction. P.O. course fair to good. Treatment fluids, hyperventilation, m. s. Course T to 102 P 110 R 24 few days; fecal drainage, crampy pain T 103 P 100 R 40 (7 day) Irrational B. coli peritonitis Death (10 day)

Autopsy: None

Clinical diagnoses: Group I - adenocarcinoma of stomach. Group II - Extension to transverse mesocolon (2) Absence of distal 2/3 of stomach, segment of transverse colon and mesocolon (3) Anterior Polya (4) End to end colonic anastomosis (5) Fecal fistula (6) Acute peritonitis Group III - (1) P ws (2) Injury of right eye

Comment: (1) Good history and work up (2) Transfusion (3) Progress notes (Lee) Other: (1) Insufficient pathological report (2) Choice of operation (3) No fluids in preop prep. (4) No peritonitis or fecal fistula on summary chart (5) No transfusion (diagnosis) (6) No eye diagnosis (7) Wassermann?

### CASE II.

W - F - M - 39 - HW. 10-18 (40 days) Ca Surg.

Adm. 5 days. Ca of stomach (Hetzler)

Complaints: Onset (6 wks). Good health before. Constant burning in epigastrium, aggravated by food, vomiting, relief? Wt loss 15 - 20 lbs. from what wt? Constipation No blood in vomitus or stool. Weakness (6 day) Unable to retain any food (4 wk). No ca. history. Sore throats in past.

Examination: Emaciation, dehydration, pigmentation (normal? pts. statement) edentulous, chest 0, B.P. 118/74, abdomen - rigidity in upper, indefinite mass in R U Q and epigastrium, hard nodule in umbilicus, nodules in culdesac, mass in rt. lower quadrant, tender movable (myoma?)

Lab.: Urine - alb ++, sugar +, few wbc. Blood - 69, 4.0, 15.7, P 91, L 8, M 1. B U N 23.33, Cl insufficient. X-ray - adenoca. of pylorus, 80% obstruction.

Treatment: Fluids, glucose, c.s. liquid diet, shampoo (nits), aspirin, catheterized, m.s. (33 day). Course: weak, emesis, pain (lower abdomen), drowsy, involuntary urination, (obstruction?), talkative, seemed better, emesis (coffee ground), continued worse, feels emaciated, soreness in legs, headache, emesis, hungry, respiration slow and irregular (m.s.?) pulse good. T. rose 6 days before exitus to 106°. Respiration slow, then up Occas temperature elevations P 90 -130.

Autopsy: Group I - adenocarcinoma of stomach Group II - (1) Extension to serosa gastro-hepatic omentum, peritoneum, umbilicus, retroperitoneal nodes, culdesac, pancreas, rt. ovary? (2) Brown and serous atrophy of heart (3) C sw heart, liver, kidney (4) Obs hydronephrosis (rt) (5) Chronic cystitis (6) Brown atrophy of liver (7) Pigmentation of skin (8) Decubitus (9) Emaciation. Group III - (1) Striae (2) Pws. (3) Adhesions of appendix (4) Pul. anthracosis (5) Arteriosclerosis 1 (6) Old thrombosis of ovarian vein (7) Petechiae.

Comment: (1) Good hist., physical, treatment. Other: (1) Chest plate? (2) Letter from physician?? (21 day) (3) Metastases to be completed (summary sheet).

### CASE III.

W - M - M - 62 - Farmer. 11-14 (10 days) Ca. Surg.

Complaints: Dyspepsia, fullness, pain, gas (20 years) Weakness. Food distress (milk) (3 yr), wt loss 30 lbs. (131 to 148 to 118) Constant pain in epigastrium after eating (6 mo) Mass? Anorexia (2 mo) Vomiting (relief) (2 wk) F.H.M. dead 75 hemorrhage from bowels. F - old age. Sister dead 1 tumor with pregnancy 1 ca. of breast. B 5, S 3, L and W.

Examination: Emaciation, no Virchows or rectal shelf, B P 102/66, large tender visible mass in epigastrium (to left), distension of abdomen, tender liver (down), spasm and rigidity, otherwise neg.

Lab.: Urine o. Blood 85, 4.49, 11.7, P 75, L 23, E 2, Gr. II, B U N 14, cl 412, expression free Hcl o Total 25 Lactic? X-ray - adenoca. of stomach probably operable, chest o Wass?

Treatment: Operation, fluids, emesis bloody, lavage, anxious, 11-20 (6 day) 1 hr. ether. Grapefruit size tumor in stomach (Pylorus) 1/3 involved. Nodules in liver. Ant. gastro-enterostomy. Course: fluids, ventilation, emesis, feels fine slight fever, gas pains, no cough, hiccoughs, gastric distress, pituitrin, m.s., hiccoughing, weaker, chest exam? Terminal rise of T (103) P (140) R (none) Terminal factor: pneumonia? peritonitis? natural course? wound?

Autopsy: None

Diagnosès: Group I - adenocarcinoma of pyloric third of stomach (1/3) Group II - (1) Metastases to liver (2) Emaciation (3) Op. wound (4) Anterior gastro-enterostomy Group III - P.ws.

Comment: (1) History (family) good work up Other: (1) Wass? (2) Lactic acid? (3) Terminal cause of death?

#### CASE IV.

W - M - M - 59 - butcher. 10-5 (48 days) Ca. Surg.

Adm. 1 day. Carcinoma of esophagus (Leonard)

Complaints: Dysphagia, wt. loss (130-100-30 lbs.) regurgitation of food and water, weakness (7 mo). Regurgitated material, never sour. Liquids would go through at times. Food stuck in neck (massage) Onset gradual. Other complaints - pain, pyrosis in chest, burning pain right side of neck (ear to sternal notch), dyspnea (3 wk) chronic cough (sometime). P.H. lung fever (childhood) rheumatism (6 yr ago), acute arthritis! knees, hip, shoulder, wrists (6 yr) g.c. (27 yrs. ago) No ca. history in family. Wife (stroke).

Examination: Weak, emaciated, senile pupils, impairment of hearing, edentulous, ulcer? near left pillar, scars in ant triangles (cause?) enlarged nodes, same, espec. left, trachea to rt. hard mass in rt supraclavicular space. B.P. 112/68, pulse 72, prominent veins on lower abdomen (direction of flow?) Pigmented area left arm, papilloma left thigh, atrophic muscles, reflexes o.

Lab.: Urine o. Blood 96 - 4.89 - 22.6 - P 92 - L 6 - M 2 Gr IV. Blood sugar 102 B U N 33.6, uric acid 4.02, cl 396. Wass o. X-ray ca. proximal third of esophagus obliteration of costophrenic angles, metastases left base? chronic bronchitis (bilateral) diaphragmatic pleurisy, early bronchiectasis. No invasion of larynx E. N. & T. consultation? 10-11 (6 day) Janeway gastrostomy, spinal, local, 1 hr. 5 min. Reaction fair. Fed liquid diet (4025 calories) Improved, up and about. Wt? not weighed. Other treatment - m.s. fluid, glucose, hyper-ventilation. 11-20 (46 day) chronic cough sputum. 2 hr. rectal and ether inhalation. Attempted resection. Tumor ruptured, adherent to trachea. Forceps in place. P.O. fair reaction. Cough continued Bronchopneumonia. Death (2nd day).

Autopsy: Group I - Carcinoma of prox. third of esophagus Group II - (1) Extension to trachea (neg. node) (2) Gastrostomy (3) Partial oesophagectomy (4) Acute bronchopneumonia (5) Acute pleuritis (6) Emaciation (7) Ileus. Group III - (1) Op. wounds (2) Pleural adhesions (3) Adenoma of thyroid (4) Edentulous (5) Calcified capsule of spleen.

Comment: (1) Excellent work up (2) Progress notes (Lee) (3) Operation (very commendable) Other: (1) wt? chart?

#### CASE V.

W - F - M - 27 - HW. 8-12 (100 days) Ca. surg.

Adm. 7 days (27 Hyperthyroidism, '28? '29 tumor)

Autopsy: Group I Sarcoma of esophagus Group II - (1) No extension? (2) Gastrostomy Group III - (1) Ghon tubercle (lower part of upper rt) (2) Tb adenitis (hilus) old

Comment: (1) Nurses notes (2) workup and treatment (3) Summary sheet Other: (1) Blood chemistry (esophageal lesion) (2) Wt? (3) Cause of exitus?

### SUGGESTIONS FOR BETTER SERVICE

1. Use mechanical (repeat) numbering system when starting charts. Result: fewer mistakes, less time. (clerk in admitting department)
2. Washing syringes with water causes blood Wassermann specimens to hemolyze. If necessary, wash with saline (Dr. Norman Johnson) Use needles only (Dr. Hilding Berglund) Wrap carefully in cotton (State Board of Health)
3. Put board strip on wall in staff room for consultation slips. File slips on separate chart boards for each service. This will save time and speed up service in answering consultations (one who has wasted time pawing through the basket).
4. Adopt uniform system for reading Benedict qualitative urine test. Opaque green is slightest positive result? (Mrs. Gleva Erskine)
5. Call laboratory for technician when blood culture specimen is to be taken. She will bring sterile culture media and help collect specimen. Too many contaminated cultures! (Miss Florence Defiel)
6. Record pathologists report on operation sheet. Make separate form for opening and closing wound and follow up on result (just an interne)
7. Too few positive tubercle bacilli reports on urines from clinically active cases. Something is wrong with our method? (Dr. Wm. Herbst).

### ANNOUNCEMENTS

1. Drs. Michelson, Berglund, Shapiro, McKinley, O'Brien, Mr. Amberg, and Mrs. Johnson are appointed a committee to revise record system and to plan "new admitting department". (Paul H. Fesler, Supt.)
2. Dr. George F. Pitkin of Hackensack, N. J. will address members of the Minneapolis Surgical Society at the annual dinner meeting at the Nicollet Hotel next Saturday at 6:30 P. M. Dr. Pitkin, an international authority on spinal anesthesia, and its use in major surgical operations, will address the society. At 1 p.m. Dr. Pitkin will give a clinic and demonstration of technic in association with the surgeons at the University Hospital.
3. Blood chemistry to lab. at 9 a.m. Real emergencies at any time.
4. Fill in main clinical date on x-ray request blank. Emergency service is being abused. Simply because you forget to send the patient down is not an emergency. We will continue to give you real service if you cooperate with us.  
(Leo Rigler)

### QUESTIONS

1. Why not start our meeting at 12:30 and stop at 1:30? Eat from 12 to 12:30?  
Answer!
2. Who should do recheck on white counts?
3. Who is responsible for history, physical, progress, and discharge notes? The staff man, the fellow, the interne, or the record clerk, after the patient has gone home?
4. MERRY CHRISTMAS AND HAPPY NEW YEAR!!

CASE I.

W - M - S - newborn. 9-29 (10 days) Pediatric Surgery.

P.H. Born 4 A.M. Absence of anus (Median raphe, folds, dimple present)  
Hosp. 5:50 P.M. X-ray 6:30 P.M. Oper. room 7:45 P.M. Returned (Exam.)

P.E. Wt. 2625 gm. T 95. Dehydrated (?) Under-developed and nourished.  
Absence of meconium through urethra, distension, visible peristalsis, vomiting.  
Heart neg. (?)

Lab. Urine 0. Hb. 120, rbc 5.16, wbc 6.9, P 92, L 6, M 2. X-ray: Reverse  
Trendelenburg. gr. 4 distension of small and large intestine with gas and fluid.  
High level near anus (1 - 2 cm. from marker)

Treat. Hypodermoclysis, glucose (gavage). Fussy, spitting mucous, bluish  
color.

Oper. 9-30, 8:20 A.M., 1 hr. 5 min. Ether. Coccyx to scrotum incision.  
Bowel located with considerable difficulty. Rectum opened and sutured to skin  
(catheter) No plastic for sphincter.

Course P.O. reaction good. Fluids, pituitrin, formula. Gained 500 gm.  
Passed meconium and feces. Developed infection of wound, cyanotic attacks, edema  
of lower extremities. 7 P.O. not doing well. T 101. R 80. 8 P.O. X-ray  
signs of pneumonia in rt. middle and upper lobes. Oxygen. 9 P.O. death  
(cyanotic attack)

AUTOPSY:

Group I: (1) Imperforate anus (complete septum)

Group II: (1) Prematurity or immaturity (2) Ileus (gas) (3) Operation  
wound (4) Infection of wound (5) Acute bronchopneumonia (massive bilateral)  
(6) Congenital heart disease (aortic atresia, patent interventricular septum,  
foramen ovale, and ductus arteriosus) (7) Cloudy swelling of liver (8) Ascites  
(saline) (9) P. WS and hemorrhage.

Group III: None

CASE II.

W - M \* S - 43. Mine laborer. 9/17 (33 days) Ca. Surg.

P.H. Hemorrhoids (many years).

P.I. (Three months) urinary pain and incontinence, bloody, painful defecation.  
Onset - rectal pain and bleeding (defecation)

P.E. Well developed and nourished. P. 100. R. 18. T. 98. B.P. 130/82.  
Mass above pubis (full bladder) Enlarged prostate. Hard, nodular, painful,  
ulcerated constriction inside anus and above.

Lab.: Urine - very many wbc. Hb 79, rbc 4.09, wbc 8.45, P. 69, L 28, E 31.  
Group I. B U N 54.2. X-ray - exostosis of ilium. Residual urine (200 cc.)

Treat.: Op. 9-20 (3 day) Time ? Spinocain. Distended bladder, mass in  
rectum to pelvic brim, culdesac, nodes involved. Colostomy. P.O. decompression  
of bladder, fluids, m. s., restless, out of bed. 9-26 - colostomy cauterized.  
Functioned well. 9-28 - radium capsule rectum 1500 mg. hr. 10-2 - B.U.N. 53.2.  
10-8 - 132%. S.E.D. 4 treatments in 8 days. Moderate reaction. 10-19 -  
moribund, acidotic, irrational. Death 10-20. Body to anatomy. T 97 to 101  
(septic) P 100 - 130. R 14 - 28.

AUTOPSY: None

CLINICAL DIAGNOSES:

Group I: Carcinoma of rectum (Type ?) No Biopsy

Group II: (1) Extension to culdesac, prostate, bladder, regional nodes,  
pelvis. (2) Colostomy (3) Probable obstructive hydronephrosis. (4) Chronic  
cystitis and pyelonephritis ? (5) Uremia ? (6) Acute bronchopneumonia ?  
(7) Emaciation.

Group III: (1) Exostosis of ilium (2) Dental caries and pyorrhea.

MSDH  
CASE III: 9 ALL

W - M - S - 68. Cabinet maker. 10-13 (12 days) Ca. Surg.

P.H.: Hurt back in fall at 26. Cast 6 mo. Deformity not marked but increased (occupation?) Hypertension for years (165/?). Sharp precordial pain, dyspnea on exertion, nervousness on excitement. No edema. Duration? Asthmatic attacks (cardiac?) several years. Mild rheumatism left leg several years ago (self-medication) Family history?

P.I.: (1) Constipation (2 yrs.) (2) Alternating constipation and diarrhea (6 mo.) (3) Blood, mucus in stools, frequency, tenesmus, (4) Weakness, moderate wt. loss? (6 mo. to 2 yrs.), (5) Herpes zoster (gangrenous) left buttock and lower extrem. (3 wk.) (consultation). (6) Hemorrhoids (6 mo.) (7) Lumbar pain (3 wk.), (8) "Cold" cough. No chronic cough.

P.E.: Deformed (rt. dorsal scoliosis and kyphosis, keel breast) arcus senilis, edentulous, lungs rales in left upper. Heart not enlarged? B.P. 175/110. Herpes. Rectal - no visible hemorrhoids. Prostate enlarged, hard, smooth, painless. Rectal tumor. Proct. - Projecting, ulcerated, nodular mass, anterior wall, 3 in. above anus, 1-1/2 x 3 cm., broad base, extends to left. No biopsy. Relaxed hernial rings.

Lab.: Urine few wbc. Hb. 95, rbc. 4.82, wbc. 6.5, P 78, L 28. Group II. Residual urine (15 cc) X-ray - extreme deformity of spine.

Operation: 10-23 (10 day) 2 hr. 40 min., ether. Adherent to bladder wall. No metastases. Caustery excision ( 2nds) Colostomy, peritoneum of pelvis not closed (drain).

P.O.: Fair B. P. 122/82. P. 132 m. s. fluid semi-Fowler, catheterized. 10-24 - coughing, pain in chest, dyspnea, rales, fluid, hyperventilation, steam, glucose, m. s., catheterized. 10-25 - T 103.2, failing. Death I P.M. T 97 - 103.2. R 16 - 44 P 70 - 130.

Autopsy: None

Clinical Diagnoses: Group I - (1) Adenocarcinoma of rectum. Group II - (1) Metastases to nodes and bladder? (2) Resection of tumor and bowel (5) Colostomy (4) Acute bronchopneumonia (5) Deformity of spine (6) Emaciation (7) Pus. Group III: (1) Hypertension (2) Prostatic hypertrophy (3) Coronary sclerosis? (4) Herpes zoster (gangrenous) (5) Edentulous.

CASE IV:

W - M - W - 67. Farmer. 10-21 (9 days) Ca. Surg.

P.H.: (1) Sharp pain in L. L. Q. (2) bloody stools (3) Wt. loss 30 lb. (3 mo.) (4) Loss of strength and appetite. Onset 3 yrs. ago. Alternating constipation and diarrhea, bloody stools, tenesmus. Relief (M.D.) suppositories. Recurrence every 3 - 6 mo. Downward course (1/2 time work) 3 yr. Pain worse. Coarse food.

P.H.: Arthritis left shoulder, vertigo, sore throats, adenitis, dry pleurisy (20 years), precordial pain on exertion, edema of ankles (3 wks) difficulty in starting urination (burning) (4 wk.)

P.E.: Emaciated, weak, uncomfortable, yellow pallor, scar on face (near left ear), red dry tongue. Apex hearing (6th) loud systolic murmur at apex and aortic! Extrasystoles (exertion) B.P. 108/78. Scaphoid abdomen pigmentation, doughy descending colon (tenderness and rigidity) Edema of ankles (variable) Rales in rt. apex.

Lab.: Urine - many wbc. Hb 58, rbc 2.84, wbc 6.95, P. 64, L. 35, M. 1. Poly. aniso. Group IV. X-ray - fibroid and calcified tb. (rt. apex): ulcerative colitis.

Proct.: Palpable mass (at end of finger) annular, indurated, papillary (10 - 18 cm.) lumen patent. Catheterized (unable to void). Prostate not enlarged? Residual? 150 to 200 cc. colonic flush, gastric expression (report?) fluids (6 day), frequent loose bloody stools, uncomfortable.

Operation: 10-28 (7 day) spinocain. Freop. diag. - ca. of left colon. (chronic ulcerative colitis) Exam. showed polyposis, no ca. Colostomy trans. colon.

CASE IV. (Cont.)

P.O.: fluids, adrenalin, m. s. fair P.O. recovery. Fowlers, catheterized (350 cc.) intravenous glucose. 10-30 (9 day) colostomy opened. Complaint of pain, drowsy, unconscious. 10-31 labored breathing, weak pulse, exitus. 10-day (hosp) 3 day P.O. T. 95.8 - 99.6; P 70 - 110; R 16- 24.

Autopsy: Group I: (1) Chronic ulcerative colitis of left transverse, descending colon, and rectum gr 3. Group II - (1) Secondary polyposis gr 3 (3) Colostomy (mid-colic) (3) Op. wound (LLQ) (4) Brown and serous atrophy of heart gr 3 (5) Emaciation gr 4 (6) Nodular sclerosis of aortic valve gr 3 (7) Coronary sclerosis gr 2 (8) Decubitus ulceration gr 1 (9) Benign hypertrophy of prostate gr 2 (10) Chronic cystitis gr 2. Group III - (1) Gen. arterio-sclerosis (ectasia gr 4) (2) Cyst of rt. kidney (3) Pulmonary anthracosis gr 3 (4) Hyaline capsule of pericardium, liver, spleen gr 2 (5) Inguinal testicle (rt) (6) Bilateral fibroid apical tuberculosis (no primary?) (7) Adenomatous thyroid (65 gm.)

CASE V.

W - F - W - 68. Housewife. 10-4 (11 days) Ca. Gyn.

P. H.: Para V Labors? Menses? No miscarriage.

P. I.: (15 mo.) onset, bleeding (1 wk) painless, weak, tired, (14 mo.) bleeding, boils on ext. genitalia, no bleeding since, (13 mo.) foul yellowish vaginal discharge. No treatment? Frequency urination? Cathartics. (3 mo.) Dull abdominal pain ( started in L.L.Q.) Wt. loss 20 - 30 lb.

P. E.: B. P. 104/68. Emaciated, extrasystoles. Rales in rt upper? Abdomen no fluid. Hard, irregular, painful, tender mass in lower abdomen, half way to umbilicus and to left (spine of ilium) Parous senile ext. genitalia. Rectocele and cystocele. Cervix - ectropion. Corpus, restricted, nodular in mass, left seems attached to abdominal wall. No edema of lower extrem.

Lab.: Very many wbc. Hb 69, rbc 3.67, wbc 17.2 P 84, L 16. B U N 9.33 Wass O.

Treat.: Pain, profuse foul discharge, weak, Kmno4, douche. T 100.4, 99.6, 99. P 80-100. D & C (6 day) dull curette (20 min.), ethylene, large amount of necrotic tissue. Carcinoma grade IV.

Course: Severe pain, nausea, M. S. elevation of head. 3 P. O. T 99.4 Weak pain, csb. glucose, sod. chloride, adrenalin, pituitrin, distension, peritoneal irridation, delirium, cold sweat, shock, Exitus.

Autopsy: Adenocarcinoma of fundus of uterus (supracervical)

Group II. - (1) Gangrene and suppuration of tumor (2) Probable extension to pelvis (3) Extension to ileum (perforation) (4) General fibrinopurulent peritonitis (5) Csw. heart, liver, kidneys (6) Acute splenitis (7) Ileus (8) Edema of feet and ankles (9) Acute bronchopneumonia (10) Emaciation (11) Serous and brown atrophy of heart (12) Hemorrhages of bladder.

Group III: - General arteriosclerosis (grade I).