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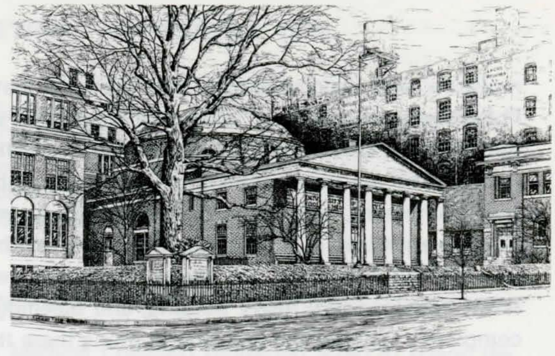
AESCLEPIAN

School of Medicine
University of Maryland



MARYLAND FAMILY PHYSICIANS INVITE EVERYONE TO ATTEND THEIR ANNUAL MEETING

All Faculty, Residents, and Medical Students at the University of Maryland are invited to attend the Annual Spring Meeting of the Maryland Academy of Family Physicians. The meeting will be held May 19-22, 1977 in New Carrollton, Maryland — one exit east of the Baltimore-Washington Parkway on Interstate 495. The conference theme will be, "Drug Actions and Interactions As Related to Selected Clinical Pictures Frequently Seen In Family Medicine." The feature speaker will be Dr. Benjamin Calesnick, Professor of Pharmacology and Medicine at the Hahnemann School of Medicine. Other speakers include:

Dr. Theodore Woodward
Professor and Chairman of the Department of Medicine
University of Maryland School of Medicine

Dr. Charles Plotz
Professor and Chairman of the Department of Family Medicine
State University of New York School of Medicine

Dr. Turner Bledsoe
Dean of Clinical Programs
Johns Hopkins School of Medicine

Dr. Edward Kowalewski
Professor and Chairman of the Department of Family Medicine
University of Maryland School of Medicine

Dr. Silas Grant
Dean of Primary Care
University of Alabama School of Medicine
Banquet Speaker on Friday, May 20, 1977

Bus transportation will be provided from University Hospital to the conference site for a nominal charge. For details, questions, or suggestions, contact:

Hans J. Koetter, M.D.
President-Elect
Maryland Academy of Family Physicians
1900 East Northern Parkway
Baltimore, Maryland

THOUGHT FOR THE DAY

Is a rich fool better off than an impoverished genius?

THIS IS THE WAY IT WAS . . . .

In Baltimore lived a man named Nate
Whom Rush in Philly grew to hate;
For Nate said, "Pish-Tush!"
To that man named Rush,
'Til Rush said, "Please leave, and close the gate!"

Nathaniel Potter, who became the first Professor of Medicine at the University of Maryland in 1807, was also the first physician to contradict Benjamin Rush in 1793 concerning the contagion of yellow fever.

Benjamin Rush believed that yellow fever was contagious under unfavorable conditions such as heat,

The University of Maryland School of Medicine
Class of 1978

cordially requests the pleasure of your company at

"PACEBREAKER"

a holiday dance and party

Friday, December 17, 1976

9 p.m until 1 a.m.

Tickets: $2.00, couples $3.00 available from student representatives, at the Student Union, and OME	Grand Ballroom Lord Baltimore Hotel Baltimore and Hanover Streets
Please: No jeans or tuxedos	A Cash bar will be provided

moisture, and decomposition, and declared that the Philadelphia outbreak of 1793 originated from some putrid coffee discarded from a ship. He also believed fevers to be the result of an imbalance of excitability and excitement, especially of blood vessels, which must be equalized in order to cure the fever. With this in mind his treatment for fevers, including yellow fever, was low diet, heavy purging, and bleeding. He completely ignored the fact that in doing these things he was producing generalized debility to relieve a disease supposed to result in the first place from debility.

Nathaniel Potter, a student of Rush during the 1793 epidemic, returned to Baltimore that same year to attend patients in Maryland. From his observations he was convinced that yellow fever was not contagious between persons, but wrote to Rush that it was due to "putrifaction of matters on the surface of the earth, after an uncommonly wet spring, followed by the driest and hottest summer that can be remembered." He inoculated himself with various materials taken from yellow fever patients, and since he never became ill, he believed this to be proof that he was right. (Of course, he could have been immune in the first place...)

It was not until 1881 that our friend the mosquito was even related to the transmission of yellow fever, and not until 1900 that proof was offered which finally supported Potter's theories. The story of Walter Reed's work started some one hundred years after Nathaniel Potter's time, and is legend to be told at another time.

Once again, thanks to Dr. Theodore Woodward for the materials from which the above was taken.

MAGNET MAN THWARTS EELS

Not long ago a man was admitted to the third floor of University Hospital who had covered himself with magnets of various shapes and sizes; he quickly became fondly known as "Magnet Man." The purpose of the magnets, he said, was to keep the lamprey eels away. Of course, we all laughed, but, do you know? Try as we might, we never once found an eel-bite on him!

CLINICAL QUIZ ANSWERS

1. e; 2. OPV and DPT at 2, 3½, 6, and 18 months. MMR at 13 months; 3. e; 4. c, d; 5. none; 6. Yes. Fever, respiratory distress, and neutropenia; 7. A broad spectrum antibiotic is probably indicated in this case; 8. Acute Epiglottis; 9. Securing and maintaining an adequate artificial airway; 10. c; 11. c; 12. 50%; 13. a, b, d, e; 14. Aspiration during the respiratory arrests and resustations; 15. d.

CLINICAL QUIZ

This month's *Aesclepian* Clinical Quiz is based on the case history of a recent patient at the University of Maryland Hospital. The *Aesclepian* editors formulate the questions and answers. There have been no corrections or criticisms of the two previous quizzes, however, constructive criticism is always welcomed. If you have a favorite case history, you are invited to submit it as a Clinical Quiz to the *Aesclepian* as directed in the title block on the last page. As in the other quizzes, the case information and the questions are arranged to be read and answered in sequence. You will learn the most by committing yourself to an answer for each question before going on to the next section. You should complete the entire Clinical Quiz before checking any of the answers. The answers that the editors believe to be correct are given at the bottom of page 3.

HISTORY:

A 3½ year old black boy had been in his regular state of good health until the day of his admission to the hospital. On that day he had been quieter than usual and had only picked at his food. He had refused to eat supper that evening and complained of ear-ache and belly pain. His mother took his temperature which was 105° F. His breathing became increasingly more labored and the audible respiratory sounds included a high-pitched, whistle-like component. This young boy continued to look sicker and was taken to the hospital at 10:00 P.M. There was no history of drooling, sore throat, vomiting, diarrhea, seizures, or foreign body aspiration.

The patient had not been in the hospital since birth. His immunizations were up-to-date, and his growth and development were within normal limits. He had no history of any food or medication allergy. His past illnesses included: (1) Mumps; (2) Roseola; (3) Bronchiolitis at 20 months of age which cleared with hydration and Quibron at home; (4) Hyperglycemic episode with glycouria with a normal 3-hour glucose tolerance test on follow-up; and (5) Genu-varum, a maternal familial bow-legged trait which is being followed by an orthopedic surgeon.

The patient lives at his maternal grandmother's house with his mother, one uncle, 3 aunts, and one cousin. There are no pets in the house. Recently, several family members have had mild upper respiratory infections.

QUESTION 1: Which of the following historical items is least likely to be of diagnostic benefit?

a. Abrupt onset of the illness
b. Fever of 105° F.
c. Respiratory distress with high-pitched breath sounds
d. No drooling
e. Past history of Mumps and Roseola
f. Bronchiolitis at age of 20 months

MINUTES OF THE STUDENT GOVERNMENT MEETING – NOVEMBER 9, 1976

Members present -

Garry Rubin - MS IV President	Mark Bainum - MS I
Bob Rovner - MS II Representative	David Otto - MS I
Francis S. George - MS IV Representative	Jim Davis - PT Sr. President
Bill Dunlap - MS II Representative	Jill Gruner - SGA Secretary
Blase Harris - President ST. Council	David Sheer - PT Jr. President
Joel Lahn - MT Representative	

The purpose of tonight's meeting was to review various travel requests and to allot funds to various organizations

Mark Bressler, MS Representative for the AAMC (American Assoc. of Medical Colleges) requested $380 to attend the national convention in San Fransisco. This organization has representatives from every medical school in the country and they discuss academic and clinical problems encountered in medical school. This request was approved unanimously and Mark was granted the $.

SNMA requested $450 to send two members to their convention in L.A. After discussion, they were granted $200 by the council.

ASMT (Med Tech) requested $350 for their convention in Atlanta, GA. They were granted $250 by the council.

PT requested $250 for their convention in St. Louis. Their request was granted by the council.

Frank George requested to be refunded $30 for a convention he attended of the ABS&ME. His request was granted.

A proposal was approved stating that any additional funds granted to the Student Council will be put into travel expenses. The travel budget was also raised today to $1400 in lieu of the leftover funds from his banquet expenses.

A letter was read, written by Alan Gaby to the Dean on the subject of note-taking. It will be revised.

Diehl Schnieder announced that there will be a re-establishment of the night film series on the UMAB campus on Friday nights. The admission will be reasonable and the films will be tried for one month. Any losses in that time will be picked up by Student Affairs. People from the St. Council are looking for people to help organize this event and help spread the news.

Thus concluded the meeting. The next meeting is scheduled for November 30 at 7:00 P.M.

QUESTION 2: With the immunizations reportedly up-to-date, this child should already have received which vaccines at what age?

QUESTION 3: The differential diagnosis for this patient should include which of the following based on the history?

a. Viral URI
b. Laryngotracheal bronchitis
c. Acute Epiglottitis
d. Foreign body aspiration
e. Paramyxoviral parotitis
f. Diphtheria

QUESTION 4: Which of the illnesses listed in Question 2 deserve special consideration and significant modification of the normal pediatric physical examination?

PHYSICAL EXAMINATION:

T. - 104° F. P. - 140 per minute R. - 34 per minute
B.P. - 100/60

This child was an alert, active, well-developed black male in moderate respiratory distress with wheezing, intercostal retractions, and nasal flaring. His throat was not inflamed, the neck was supple, and there was no cervical adenopathy. His lungs had diffuse wheezing throughout both inspiration and expiration. The remainder of the physical examination was within normal limits.

QUESTION 5: Which of the diagnostic possibilities listed in Question 2 can be excluded by the physical findings?

DIAGNOSTIC STUDIES:

A CBC revealed a WBC count of 800 per mm^3 with 47% polys, 37% bonds, 16% lymphs, 1% monocytes, and 1% metamyelocytes. The hemoglobin was 11.2 mg/dl, and the hematocrit was 32.9%. Electrolytes were normal, but the blood glucose was 300 mg/dl. Chest X-ray and urinalysis were within normal limits. Blood and throat cultures were taken. Epinephrine 0.15 cc was given subcutaneously twice without any improvement in the patient's respiratory distress.

QUESTION 6: Would you admit this child to the hospital? If so, what would your admitting diagnosis be?

QUESTION 7: Would you begin antibiotic therapy; and if so, which antibiotic would you use?

CLINICAL COURSE:

The patient was admitted and given 250 mg of Ampicillin IV every 6 hours. While receiving his 4:30 A.M. dose of ancillary oral medication, he gagged and proceeded to respiratory arrest. Resusitation was successful but required bicarbonate therapy. He arrested again at 6:00 A.M. and blood gases revealed a severe respiratory acidosis. Intubation was accomplished with difficulty under general anesthesia. Laryngoscopic exam showed epiglottic erythema and edema. A 4.5 mm endotracheal tube was inserted and solucortif 100 mg was given IV. The patient was then transferred from the admitting hospital to a tertiary medical center.

QUESTION 8: At this point what is the most likely diagnosis?

QUESTION 9: What is the most important therapeutic action at this time?

HOSPITAL COURSE FOLLOWING TRANSFER

The patient arrived at the medical center with the ET tube in place in mild respiratory distress. Blood gases on 68% oxygen were pH = 7.38; pO_2 = 82; pCO_2 = 37; HCO_3 = 22. Temperature was 101.6° F. Pulse rate was 148 per minute, and the respiratory rate was 28 per minute. The blood pressure was 100/60. He was alert and answered questions appropriately but was somewhat combative when approached. His neck was supple with some question of adenopathy. Breath sounds were normal bilaterally without wheezes or rales.

Laboratory studies showed that the WBC count had increased to 1,700 per mm^3 with 37% bands. The remainder of the hemogram was unchanged. Glucose remained elevated at 240 mg/dl. Serum enzymes reported in international units were: alkaline phosphatose = 160; GOT = 346; GPT = 109; and LDH = 340. Urinanalysis dipstick revealed 4+ glucose and a large amount of blood. Microscopic examination of the urine sediment showed rare RBC fragments without any WBC's, bacteria or casts. A lumbar puncture gave an opening pressure of 185 mm H_2O and contained 5 lymphocyets, 6 monocytes, and 29 RBC's. CSF glucose was 87 mg/dl and the protein was 21 mg/dl. Blood, CSF, sputum, and urine cultures were taken as well as viral titres for parainfluenza, ECHO, adeno, and rhino viruses. The chest X-ray showed a right upper lobe consolidating process with some degree of collapse which was compatible with pneumonia, aspiration, or blocked airway.

The patient was taken to the operation room and with an ENT specialist standing by, the pediatric anesthesiologist removed the endotracheal tube and inserted a naso-tracheal tube. The epiglottis was only mildly edematous at that time. He was taken to the pediatric intensive care unit and continued on IV ampicillin. He was successfully extubated by the anesthesiologist 48 hours later, and placed in a mist tent and observed for an additional 24 hours. On the second day, the first blood culture, drawn the night of his admission, grew an organism which confirmed the diagnosis.

QUESTION 10: Given that this patient had a bacteremia, which of the following diseases are most likely?

a. Viral URI
b. Laryngotracheal bronchitis
c. Acute Epiglottitis
d. Foreign body aspiration
e. Diphtheria

QUESTION 11: Given that this patient had acute epiglottitis, which of the following organisms is the most likely cause of the bacteremia?

a. Listeria monocytogenes
b. Corynebacterium diphtherise
c. Haemophilus influenzae, Type b.
d. Bordetella pertussis
e. Neisseria meningitidis

QUESTION 12: What percentage of cases of acute epiglottitis will yield a positive blood culture?

QUESTION 13: Which of the following abnormal laboratory findings could be explained by this bacterial sepsis?

a. Leukopenia
b. Elevated serum enzymes
c. RUL lung infiltrate
d. Glucosuria and hematuria
e. Elevated WBC count in CSF

QUESTION 14: What is the most likely cause of the RUL lung infiltrate seen on X-ray only after transfer to the medical center?

QUESTION 15: Given that acute epiglottitis is a true pediatric emergency with a peak incidence during November through March in children primarily between the ages of 2 and 6, all but one of the following are presenting symptoms seen in at least 50% of the cases.

a. Respiratory distress
b. Sore throat
c. Stridor
d. Cough
e. Dysphagia

FOLLOW UP

The patient recovered without sequelae following a 5 day hospitalization and a 10 day course of oral ampicillin given at home.

THE AESCLEPIAN **NO. 3, DECEMBER, 1976**

Co-editors. . . . . . .Diehl Snyder, MS IV
. . . . Deborah Monk, MS III

The *Aesclepian* solicits material from all members of the UMAB medical community. Announcements, letters, and creative material should be submitted no later than the first day of each month for publication the following week. All materials may be left at or sent to:

The AESCLEPIAN
c/o Office of Student Affairs
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660 W. Redwood Street
Baltimore, Maryland 21201

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