You are called to the Emergency Room in June, to see an 18-month-old.

CC: Unconscious

You are asked to evaluate an 18 month old boy, Ben, whose mother states she was unable to awaken him this morning. He was awake later than his typical bedtime, he “kept getting out of bed” last night. She did not hear him up after 1:00. When she went into get him up at 8:00, 90 minutes after he usually gets up, she could not awaken him. He was breathing and his color was maybe a little pale. He only moans when he is bothered. She called 911. He did cry when he had his IV started by the paramedics, but otherwise is unchanged since she found him.

He has no fever. She has no idea what could be wrong with him. She states that he has been fussier than usual over the last three or four days. He has slept his usual amount, or maybe a little more than usual.

PMH: Ben broke his leg falling off the counter in the kitchen a couple of months ago. He healed well and has been out of the cast for a couple of weeks.

Otitis media twice, once at 4 months and the other at 6 months.

Mom was G3P1, Ab1. The pregnancy was uncomplicated though Ben came three weeks early. He went home with her. She smoked a pack a day and occasional marijuana during the pregnancy. She is 32 weeks pregnant now.

Development: Ben has been walking since 11 months. He loves to climb and “gets into everything.” He seems to understand everything, but only says a couple of words. He is prone to temper tantrums lately. He throws himself on the floor and screams and kicks and punches. He is a picky eater and her husband hates that.

Fam Hx: Dad has ADD diagnosed in grade school. He did not get a high school diploma; he got a “vocational degree.” He works as a mechanic in an auto garage. Mom is healthy. Grandparents on both sides are well except paternal grandfather who died in an auto accident in 1980. Maternal grandmother has hypertension and early diabetes. She is on a pill for the diabetes.

Social: Mom and Dad live in a duplex apartment in the suburbs. There is some peeling paint on the moldings. There are a lot of paint chips falling off the house. Mom works three evenings a week in the billing department at a local department store. She worked last night and her mother watched Ben. Ben just moved to a “big boy bed” in anticipation of the new baby.
Dad “has a temper” and mom even threw him out for a brief time early in her pregnancy when he came home drunk and pushed her into a wall.

Mom has prenatal vitamins in the house and dad has allergy medicine (possibly Tylenol Allergy and Sinus) and some Benedryl and Aspirin. In addition, her parents were over to visit yesterday. Her dad has just started on a new medicines, Zestril, Zocor and they also gave him a “happy pill,” clonazepam for his nerves. They have several common house plants “phycus,” a couple of cactuses, philodendron, and there are holly and evergreens that berry outside.

**PE:**
Cute, solid frame, brown hair neatly cut in his sleeper curled up on the bed. R anticubital IV is in. Respirations are easy and he seems comfortable, though he does not open his eyes to voice or movement. He does push away painful stimuli.

- BP=72/56  RR = 22  T = 99  R  HR = 123  O2 sat = 99%
- WT = 26 lbs  FSBG = 68

- HEENT grossly intact. Fundi hard to visualize, but disk is seen to be normal.
  - Moist mucosa
  - Neck hard to evaluate
- Chest clear with good air entry
- Cor: regular and normal S1 and physiologically split S2
- Abd: soft, not tender, stool quiac neg.
- Extremities: normal
- Neuro: all normal that you can do.
- Skin: Bruises on the pretibial area and one 2x1 cm mark on left chest wall.
TEACHING NOTES

DAY 1
1. Specifically discuss what to read…..
   A review or textbook on mental status changes in children
      In depth on one specific problem that this child could have
      Why might he have that diagnosis or not – specific info from the write-up

DAY 2
2. Make a one sentence summary that includes a statement of:
   the child’s prior health
   the chief complaint
   some of the pertinent positives and negatives

   *18 month old who did not awaken this morning and now is only responsive to pain. He has a nonfocal examination and exposures to several possible toxins.*

3. Develop a differential diagnosis for the problem presented here.
   Include -
       ingestion
       Meningitis
       Metabolic disease
       Endocrine disease – adrenal
       insufficiency.

4. Have the students present their specific problems and why they think that this child does or does not have the diagnosis that they read about.

   Try to get each student to:
   talk
   ask each other questions
   comment on the presentations

   What additional information do they need to tell the difference between the different diagnoses?

   Get the students to commit to a Diagnostic
   Therapeutic
   Monitoring plan

5. Hand out the database sheet.
6. Assume that all other tests that they suggest are normal or not revealing.

7. *What do they think this child has?* –mixed picture of depression and hyperthyroid

This young lady went to both counseling and to the endocrinologist.

That day she was started on a betablocker and tapazole. Over the next three weeks her irritability decreased, her palpitations stopped after a few days. She also noted that she had fewer loose stools and less sweating, though she had not thought that they were a problem before.

Her counselor found that her sister had been verbally abusing her and they were not allowed to visit each other without an adult being present. They would not longer share a room for visitations. She very much missed seeing her father on the weekends and arrangements were made for monthly visits to see him.

8. *Does this child’s size and growth pattern change your differential diagnosis?*

They should consider endocrine and autoimmune diseases more seriously.

9. *How would you evaluate and deal with this child’s behavior?*

Note that the patient/parent interaction is not normal and how to evaluate it.

10. *Ask them to list the things that they learned from this case.*
TEACHING NOTES

DAY 1
11. Develop a **differential diagnosis** for the problem presented here.
   Include -
   - Ingestion of meds
   - Ingestion of plants
   - Meningitis – viral or bacteria
   - Trauma or abuse
   - Lead intoxication
   - Seizure

List **other issues** raised in this case – domestic violence
   - multiple accidents in a young child

12. Specifically discuss what to read…..

A **review or textbook** on the general topic of mental status changes
   In **depth** on one specific problem that this child could have
   Why might he have that diagnosis or not – specific info from the write-up
DAY 2

13. Make a one sentence summary that includes a statement of:
   the child’s prior health
   the chief complaint or most important problem
   some of the pertinent positives and negatives

   Ben is an 18 mo old with a history of a broken leg and otitis media, living in a household with many possible toxic exposures, who comes to the emergency room by ambulance with mom who has been unable to arouse him for several minutes.

14. Have the students present their specific problems and why they think that this child does or does not have the diagnosis that they read about.

   Try to get each student to:
   talk
   ask each other questions
   comment on the presentations

   What information do they need to distinguish between the different diagnoses? Discuss how each helps to distinguish

   Get the students to commit to a
   Diagnostic plan
   Therapeutic plan
   Monitoring plan

15. Hand out the database sheet. (Assume that all other tests that they suggest are normal or not revealing.)

16. What do they think this child has? – an ingestion of grandma’s medication.

17. Does this child’s size and growth pattern change your differential diagnosis?

18. Who do you need to evaluate for genetic/congenital possibilities?

19. Ask them to list the things that they learned from this case. Have them fill out the index card for this case.