Case Study: Adolescent with Spina Bifida / UTI

1. **CASE AUTHORS**
   - Name
   - Department of Nursing – NP Programs
   - Phone
   - FAX
   - Name
   - Department of NP
   - Phone
   - FAX

2. **TOPIC OF THE CASE:**
   Adolescent Female with Spina Bifida & UTI

3. **LEVEL OF EXAMINEE THIS CASE IS BEING WRITTEN FOR:**
   [X] Nurse Practitioner

4. **CATEGORY OF CLINICAL PROBLEM THIS CASE ADDRESSES:**
   - [ ] Acute Serious
   - [X] Acute Limited
   - [X] Chronic Subacute
   - [ ] Psychiatric/Behavioral
   - [ ] Well-Care/Prevention
   - [ ] Other:

5. **PURPOSE OF THIS CASE:**
   - [X] Teaching
   - [X] Assessment
   - [X] With Feedback

6. **TIME ALLOTTED FOR ENTIRE TASK (includes SP/examinee encounter + interstation activity):**
   FIFTEEN MINUTE STATION W/SP + 5 MIN INTERSTATION

7. **DISTRIBUTION OF TIME AND TASKS**
   Divide time allotted into tasks required of the examinee:
   - Check off skills this case is intended to evaluate or teach:
   - Estimate # min you believe examinee needs to perform each task:
   - [X] Data Gathering (History-Taking) 5 min.
   - [X] Education 2 min.
   - [X] Physical Examination 5 min.
   - [X] Advise Patient of Diagnosis 2 min.
   - [X] List Differential Diagnoses 1 min
   - [X] Feedback from SP 5 min.

*Development of this content was partially supported by a grant from HRSA (D09HP18998-01-00).*
Case Study: Adolescent with Spina Bifida / UTI

8. FACILITY/ROOMS RESERVED FOR THIS ACTIVITY:
   [X] Clinical Learning Lab/ SP Rooms  [ ] Seminar Rooms
   [ ] Auditorium  [ ] Campus
   [ ] Other:

9. INTERACTION FORMAT:
   Participants
   [X] 1 Trainee, 2 SP (1 Adult and 1 Adolescent)

10. SETTING OF THE INTERACTION:
    [X] Family Practice Office  [X] Nurse Practitioner Care

11. FURNISHINGS IN THE EXAM ROOM:
    [X] Desk, Chairs, and Exam Table

   EQUIPMENT/PROPS IN THE EXAM ROOM:
   [ ] X-Ray View Box  [ ] X-Ray Calipers  [ ] Reflex Hammer
   [X] Stethoscope  [ ] Tuning Fork  [ ] Neuro Exam Kit
   [ ] Cardiac Monitor  [ ] Roll Board  [ ] I.V. Pole + Solution
   [X] Crutches  [ ] Collar - Type:
   [ ] Other:

   EQUIPMENT/PROPS AT THE STUDENT CARRELS:
   [ ] X-Ray View Box  [ ] X-Ray Calipers
   [ ] Other:

12. LIST POSSIBLE DIFFERENTIAL DIAGNOSES (asterisk actual diagnosis):
    *Cystitis
    Pyelonephritis
    Chlamydia
    *Spina Bifida

13. PHYSICAL CHARACTERISTICS THE ACTUAL SP SHOULD HAVE:
    Gender:  [ ] Male  [X] Female  [X] Immaterial
    Age:  [X] Immaterial
    Race/Ethnicity:  [X] Immaterial
    Body Type:  [ ] Slender  [ ] Average  [X] Overweight  [X] Immaterial
    Ideal Height/Weight:  [X] Immaterial

14. ESSENTIAL “REAL” PHYSICAL FINDING(s) OR ATTRIBUTES THE SP SHOULD HAVE:
    None
Case Study: Adolescent with Spina Bifida / UTI

15. PHYSICAL FINDINGS THE SP SHOULD NOT HAVE:
Cardiac or Respiratory Abnormalities

16. PHYSICAL EXAM REQUIRED:
[X] Abdominal
[X] Respiratory
[X] Cardiac

17. CASE REQUIRES THE SP TO SIMULATE THE FOLLOWING PHYSICAL FINDINGS:
[X] Abdominal Discomfort
[X] Fatigue
[X] Crutches for Ambulation

INSTRUCTIONS FOR THE EXAMINER

CASE INFORMATION: This 14 year old female has been followed in the practice for 2 years. This is your first encounter. She is accompanied by her mother. She was diagnosed with Spina Bifida (closed meningocele) at birth. No siblings, lives with mother. Parents are divorced. Visits her father monthly. Attends middle school and is an Honor Student. Has some mobility limitations and uses crutches. Allergy to Latex. Immunizations UTD. Medications:
MV. Ht: 60 inches; Wt: 120 lbs; Temp: 101.1; HR: 90; RR: 20; BP: 110/70

Chief complaint: Pain and burning on urination and fever x 3 days

DURING THE ENCOUNTER:
[X] Obtain a focused and relevant history
[X] Perform a focused and relevant physical exam
[X] Offer some initial recommendations to the patient and parent (see NOTE immediately below)

The task in this case is to assess the GU status of a 14 year old girl with Spina Bifida, using history-taking with adolescent and parent and physical examination.
Case Study: Adolescent with Spina Bifida / UTI

STANDARDIZED LIFE SKETCH

18. Setting of Encounter: Family Practice Office
The Patient is the Adolescent SP: Seated on the exam table wearing exam gown, underpants, bra and shoes.
The Mother SP is sitting in chair next to the exam table.

EXAMINER WASHES HANDS ON ENTERING EXAMINING ROOM

19. What do you want the SP to say to the examinee's first query:
   Parent SP: “Hi, We’re back again!”
   Adolescent SP: Silent

20. IF THE EXAMINER REMAINS SILENT, or acts as if waiting for more information, or asks an open-ended question:
   Parent SP: “I would like to stay in the room during the exam.”
   Adolescent SP: “Mom, I am old enough to be by myself. This is embarrassing with you here.”

   IF THE EXAMINER ASKS: “I would like to speak with you both and then give your daughter some privacy and examine her by herself if that is ok with you?”
   Parent SP: “If she doesn’t mind.”
   Adolescent SP: “Yes. Thank you!”

   IF THE EXAMINER ASKS THE ADOLESCENT SP: “How are you feeling today?”
   Adolescent SP: “Not so good. I have a lot of pain and burning when I pee.”

A. HISTORY OF PRESENT ILLNESS/DIMENSIONS OF SYMPTOMS:

21. Expand on your history and characteristics of major symptoms from onset to present in the form of a time line; if pain, please include: onset, duration, location, quality, radiation, intensity, exacerbating, alleviating, past experience w/symptom(s).

   History given by PARENT SP and ADOLESCENT SP:
   Parent SP: “It seems like she has this problem every six months.”

   IF THE EXAMINER ASKS: “When did the pain and burning start?”
   Parent SP: “She only told me about it yesterday.”
   Adolescent SP: “I don’t tell you because you get all upset. It started a couple of days ago.”

   IF EXAMINER ASKS: “Tell me what your urine looks like.” or “Is there blood or mucus in your urine?”
   Adolescent SP: “It smells bad and looks more cloudy. I didn’t notice any blood. I have some itching too.”

   IF THE EXAMINER ASKS: “What have you tried so far to help him?”
   Adolescent SP: “I thought if I drank more water and cranberry juice it would get better by itself. I took some Tylenol too. Just 1 tablet 3 times yesterday and I took 1 today before we came here.”
Case Study: Adolescent with Spina Bifida / UTI

IF THE EXAMINER ASKS: “Has anything else changed?”
   Adolescent SP: “Not really except I feel tired.”
   Parent SP: “She hasn't been eating as much as usual.”

IF THE EXAMINER ASKS: “I would like to meet with your daughter now if that is ok with you both and I will ask you back to the room in a few minutes?”
   Parent SP: “If that is ok with her.”
   Adolescent SP: “That's ok.”

IF THE EXAMINER ASKS: “Has anything changed at home?”
   Adolescent SP: “Mom has a new boyfriend that I don't like very much. But he doesn't bother me I just don't like the way he talks to her.”

IF THE EXAMINER ASKS: “Have you started dating?”
   Adolescent SP: “Well just to go to the basketball games and get food after. Mom is ok with that.”

IF THE EXAMINER ASKS: “Have you and your friend kissed or any other sexual contact yet?”
   Adolescent SP:

ADOLESCENT RESPONDS TO THE FOLLOWING QUESTIONS:

Belly Pain:
   Adolescent SP: “Yes.”

IF THE EXAMINER ASKS: “How would you describe the pain from 0 to 10?”
   Adolescent SP: “8.”
   Pain anywhere else:
   Adolescent SP: “No, just my back and when I pee.”

Fever:
   Adolescent SP: “Yes, for a couple of days”.

Vomiting, diarrhea or constipation?
   Adolescent SP: “No.”

Have you passed any blood or mucus within the last few weeks?
   Adolescent SP: “No.”

How many times a day have you been eating?
   Adolescent SP: “I usually eat a lot but I haven't been hungry for about a week.”
Case Study: Adolescent with Spina Bifida / UTI

22. IF THE EXAMINER ASKS about exercise:
   Adolescent SP: “I swim and throw basketballs outside. I know I should find more things to do because
   I am gaining weight.”

   IF THE EXAMINER ASKS: “Do you always need to use crutches to walk?”
   Adolescent SP: “Most of the time. I can walk without them but I get nervous when I am not in my
   house.”

23. Psychosocial consequences: How does the problem influence or affect the pt?
   IF THE EXAMINER ASKS:
   Adolescent SP: “I don’t want to go out with my friends or go to school. I just want to sleep most of the
day.”
   Parent SP: “She is really tired and hasn’t gone out.”

24. Response to symptoms: What has the patient done about the symptoms (other than seeking health care)?
   IF THE EXAMINER ASKS:
   Adolescent SP: “Drinking water and cranberry juice and taking Tylenol.”

25. Meaning of the illness: patient's ideas/feelings about causes, implications, fears about problem/illness?
   Adolescent SP: “I don’t understand why I get these infections. I am scared that I did something to
   cause it.”

26. PAST MEDICAL HISTORY: HISTORIAN: PARENT SP and ADOLESCENT SP

26. Medical:
   Parent SP: “Not too many. When she was born and diagnosed with Spina Bifida I was upset but she
   has done really well except for getting urinary tract infections twice a year.”
   Birth: “They said she had the meningocele type of Spina Bifida, and that was repaired with surgery
   when she was a few weeks old. It’s very confusing to me. I had her when I was in my 30’s and was
   really surprised how few problems she has had.”

27. Surgical:
   Parent SP: “Meningocele that was repaired when she was a few weeks old.”

28. Chief Complaint: Pain and burning on urination and fever x 3 days.

29. Allergies:
   Parent SP: “Latex”
Case Study: Adolescent with Spina Bifida / UTI

30. Medications:
   Parent SP: “A multivitamin.”

D. FAMILY HISTORY:

31. Current and past health of parents, sibs, adolescent:
   Parent SP: “There is no history of anything like this that I know of. My parents are well and so are her father’s.”

32. Deaths: dates and age at death of family members:
   N/A

E. PSYCHOSOCIAL HISTORY
   Present/Past:

33. Marital status:
   Parent SP: “I’ve been divorced for 3 years.”

34. Home Environment:
   IF THE EXAMINER ASKS:
   Parent SP: “We live in a single one story home in a nice neighborhood in the suburbs. Easy to get around and lots of friends.”

37. Tobacco/alcohol/illicit drug use?:
   Adolescent SP: “No.”

38. Significant events in pt’s life: stresses, pleasures, death, divorce, financial hardships?:
   Parent SP: “My husband and I divorced 3 years ago. I’m dating but my daughter doesn’t like him. We’re ok financially.”

39. Parent employment:
   Parent SP: “I work full time as financial advisor. I have my own business.”
Case Study: Adolescent with Spina Bifida / UTI

F. MENTAL STATUS EVALUATION

42. Past psychiatric history?
   No.

43. Anxiety?
   No

44. Mood changes?
   Yes, irritable occasionally.

45. Memory or cognitive changes?
   No.

46. Disturbing thoughts or ideas?
   No.

47. Other?
   No.

G. FUNCTIONAL STATUS:

49. Pt able to take care of daily activities? (school, dressing, washing self?)
   Parent SP: “She takes care of herself. And is as active as she can be with crutches.”
   Adolescent SP: “I like to swim and throw basketballs with my friends outside.”

H. OTHER:

50. Other than HPI, any other medical/psychosocial problems the pt is currently facing?
   Parent SP: “Not that I am aware of but I think she likes a boy in her class.”

51. What is your biggest worries/main concerns?
   Parent SP: “That she will keep having problems like this.”
   Adolescent SP: “I don’t like missing school.”

52. Patient expectations: what does the patient expect/want from health care provider?
   Adolescent SP: “Tell me what to do. Do I need an antibiotic again?”
Case Study: Adolescent with Spina Bifida / UTI

53. Adolescent SP Appearance: clothing, grooming, etc. (ex: neat, disheveled, in hosp. gown, etc., or: clothing and/or appearance unimportant to the case)? Sitting on exam table in examining gown with underpants, bra, and shoes on.

54. Affect/Behavior: body language, mannerisms, eye contact, angry, sad, talkative, nervous, happy to see NP today?
   - Adolescent SP: Pleasant but impatient
   - Parent SP: Anxious

55. Do any questions posed by the examinee change the SP’s appearance or affect (disturb either of the SPs or make either sad, fearful, reassured)?
   - YES: Questions related to dating and questions related to mother’s boyfriend.

56. Creating empathic opportunities: what do you want the SP to say, or what kind of behavior would create an opportunity in this case, for the examinee to express empathy?
   - YES: “I’m worried that she will have more serious problems later on when she is older.”
Case Study: Adolescent with Spina Bifida / UTI

SKILLS PERFORMED
1) Addresses parent and adolescent
2) Provides safe environment for adolescent
3) Provides privacy for adolescent
4) Takes adequate health history
5) Inspects pt head to toe
6) Inspects and auscultates anterior, posterior and lateral lung fields
7) Auscultates heart sounds
8) Abdominal assessment: Inspect, auscultate, palpate and percuss
9) Vaginal exam or refer to pediatric gynecologist for follow up

CONTENT CHECKLIST
Category 1. Data gathering. I TOLD THE EXAMINER or /THE EXAMINEE ASKED ABOUT:
1) Past medical and psycho-social history from parent and adolescent
2) History of present chief complaint including onset and duration
3) Management of problem
4) Immunizations
5) Diet and activity
6) Allergies
7) Medications
8) Behaviors
9) Living environment
10) Management of CP - (therapies, home management)

PHYSICAL EXAM EVALUATION: did the examinee perform:

[ ] Head to toe inspection
[ ] Anterior, posterior and lateral respiratory assessment
[ ] Cardiac assessment
[ ] Abdominal assessment
[ ] Vaginal exam or refer to pediatric gynecologist for follow up
Case Study: Adolescent with Spina Bifida / UTI

SKILLS CHECKLIST

I. DATA GATHERING SKILLS

Did the examinee …

1) Provide a safe environment for the adolescent?
2) Provide privacy for the adolescent?
3) Allow the parent and adolescent SP to finish opening statement without interruption?
4) Get the chronology of the adolescent's present illness from the beginning until now?
5) Use “open-to-close cone” question style?
6) Repeat or summarize information I’ve given at least once?

II. INTERPERSONAL SKILLS

Did the examinee…

7) Offer encouraging, supportive or empathic comments?
8) Demonstrate attentive listening?

III. INFORMATION GIVING SKILLS

Regarding the parent SP: Did the examinee…

9) Explain reasons for recommendations?
10) Ask about barriers to adherence?
11) Check my understanding at least once and/or solicit the parent’s questions?
12) Use language I can understand?

IV. ORGANIZATIONAL SKILLS

Did the examinee…

13) Demonstrate organizational skills during the entire encounter?

V. PATIENT SATISFACTION

14) Overall, I was satisfied with this NP/patient interaction