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**“ ...I HAVE  
TREMOR”  
TUTORIAL ONE**

YEAR TWO, NERVOUS SYSTEM BLOCK

**Curriculum Development Unit**  
**STUDENT'S CASE**  
**CASE 3; 2013**

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Mr. Saad Qahtany a 65 years old retired security officer comes with his son to a local general practitioner. He has tremor of his right arm and hand. He also feels stiffness in his shoulder region. His son says that "over the last six months we noticed that my father has become slow in his movements".

**Discussion Questions:**

- Are there any difficult words you do not understand?
- List the key information about Mr Saad.
- Identify Saad's presenting problems.
- For each problem, generate a list of possible causes (hypotheses).
- What further information would you like to know from history and examination to refine your hypotheses?

Mr. Saad has a tremor of his right arm and hand for the last 8-9 months. At first it occurred occasionally and mainly in his right hand. But over the last two months increased and involved his arm and hand. It increases when people comment about his tremor and when he is in stressful situations.

The stiffness of the right shoulder region has been for about 5-6 months. There is no pain on rest or with moving his shoulder. Mr. Saad also mentions that it is difficult to turn his body in bed or move from side to side.

Saad also was slow in his movements for about 6 months. Sometimes he feels unsteady. When he goes with his family to a shopping mall he is always behind and slows in his walking. He walks in short steps. Saad remembers that when he used to work as a security officer in a similar mall he used to walk a lot during his duty. He also noticed disturbance in his sleep for the last 4-5 years.

#### Past Medical History

Saad has no history of heart, or lung or blood disease. He was admitted to hospital when he was 12-year-old for appendectomy.

#### Family History

He has six grownup children and 12 grandsons and daughters. Saad's parents died when they were 85 and 82 years old.

#### Medication and Allergy

Nil

#### Smoking:

Nil

#### Social History

He is living with his wife and one of his son who is married and has three children.

#### Clinical Examination

Saad has decreased facial expression. He speaks in a low tone voice. Although he rests his right arm on his body while sitting, his right arm and hand show tremor. There is no evidence of hypothyroidism (low thyroid functions). Both ears are normal. His vital signs are summarized in the table below:

Vital Signs	Patient	Normal range
Blood pressure	130/80	100/60- 135/80 mmHg
Pulse rate	70	60-100/min
Respiratory rate	18	12-16/min
Temperature	36.7	36.6-37.2 °C

## **Nervous System Examination**

### Gait:

When asked for walking, Mr. Saad stands in a slow movement. On standing his body is leaning forward. He walks in slow and short steps. No evidence of cerebellar disease.

### Cranial nerves:

All cranial nerves are normal.

### Motor Power Examination:

On passive flexion of the right elbow there is a cogwheel like resistance (initial resistance followed by a release of movement). Normal on the left side.

### Sensory Examination:

Normal for both sides.

## **Musculoskeletal System**

No evidence of myopathy (muscle disease).  
Normal bones and joints

## **Cardiovascular and Respiratory Examinations:**

Normal

## **Discussion Questions:**

- Are there words that you do not understand?
- Summarize key information that you have obtained from this progress.
- Identify Saad's new problems. Provide hypotheses for each problem.
- Use the new information obtained to refine your hypothesis.
- What Should the doctor do at this stage?

The general practitioner refers Mr. Saad to a neurology consultant. The consultant explains the nature of the disease to Saad and commences him on Levodopa coupled with a peripheral decarboxylase inhibitor (PDI) tablets. He advises him to use this medication and arranges for him to revisit in five weeks.

**Discussion Questions:**

- Are there any difficult words that you do not understand?
- On the basis of new information from the clinical examination refine your final hypothesis.
- Why the consultant started him on Levodopa coupled with a peripheral decarboxylase inhibitor (PDI)?
- How this medication can help Saad?
- Work out as a team to identify your "learning issues"

## Resources

A note to students: You are not required to read all these textbooks and resources to prepare for your learning issues. You could use one textbook or one resource for each discipline. For example, for this case you will need to use a resource covering issues related to the case from four disciplines: Physiology, Anatomy, Histology and Medicine. Once you have identified your learning resources, research them for your learning issues and the questions raised in the group discussion. You might choose to use alternative resources other than those listed below:

### Textbooks:

- Snell RS. Clinical Anatomy by Systems. Philadelphia: Lippincott, Williams & Wilkins; 2007.
- Moore KL, Dalley AF. Clinically Oriented Anatomy. 4th ed. Philadelphia: Lippincott, Williams & Wilkins; 1999.
- Rhoades R, and Pflanzer R. Human Physiology, 4<sup>th</sup> ed. London: Brooks/Cole, 2003.
- Drake RL, Vogl W, Mitchell AWM. Gray's anatomy for students. Philadelphia: Elsevier Churchill Livingstone, 2005.
- Guyton AC and Hall JE. Textbook of Medical Physiology. 10<sup>th</sup> ed. Philadelphia: WB Saunders & Co, 2000.
- Gartner LP and Hiatt JL. Color Textbook of Histology. 2<sup>nd</sup> ed. Philadelphia: WB Saunders & Co, 2001.
- Kumar P and Clark M. Clinical Medicine. 5<sup>th</sup> ed. Edinburgh: WB Saunders, 2002.
- Fox SI. Human Physiology, 9<sup>th</sup> Ed. McGraw Hill, 2005

### Educational websites:

1. <http://www.nhs.uk/conditions/Parkinsons-disease/Pages/Introduction.aspx>  
Parkinson's disease the real story. The video and related website are useful in providing you with a simple introduction about Parkinson's Disease and its impact on patient's life
2. <http://www.epda.eu.com/>  
European Parkinson's Disease Association. This website introduces you to a wide range of issues related to Parkinson's Disease. The section about medications used might be useful to you. You might be interested to explore other parts of this website.
3. [http://3d-brain.ki.se/atlas/basal\\_ganglia.html](http://3d-brain.ki.se/atlas/basal_ganglia.html)  
This website from Karolinska Institute. It describes the different components of the basal ganglia with useful illustrations.