

James Pauls

1. James Paul

1.1 Meet James Pauls



James Pauls

James (male, 58) is a patient you know well. He is married, has three kids, and works as the maintenance person at a large local school.


He has a cheery disposition and you cannot recall him asking for work-related notes (modified duties or time off).

Reason for Visit Your Response History of Present Illness

What do you think?

The screenshot shows a patient profile for James Pauls. On the left is a vertical sidebar with icons for patient info, notes, charts, and a person icon. The main content area has the patient's name 'James Pauls' at the top. Below it is a text box with a description of the patient. At the bottom of the main area are three buttons: 'Reason for Visit', 'Your Response', and 'History of Present Illness'. Below these is an orange button that says 'What do you think?'. On the right is a full-body illustration of a man with a beard, wearing a blue shirt and jeans, with a speech bubble icon above his head.

Button 1 (Slide Layer)



James Pauls

“Hi Doc, over the last three months or so, I have been noticing some trouble performing tasks.”

James

Reason for Visit Your Response History of Present Illness

What do you think?

This screenshot is identical to the previous one but includes a slide layer. The slide layer is a light yellow speech bubble with a close button (X) in the top right corner. It contains the text: “Hi Doc, over the last three months or so, I have been noticing some trouble performing tasks.” Below the text, the name 'James' is centered. The slide layer is positioned over the main text area of the patient profile.

Button 2 (Slide Layer)

The screenshot shows a slide titled "James Pauls" with the SCFFPCLearn logo in the top left. On the left side, there is a vertical toolbar with icons for home, back, forward, and user profile. The main content area features a yellow speech bubble with the text: "Sorry to hear that, James. Could you provide some specifics for me?". Below the bubble is the name "You". Underneath are three dark blue buttons: "Reason for Visit", "Your Response", and "History of Present Illness". At the bottom center is an orange button labeled "What do you think?". On the right side, there is a full-body illustration of a man with a beard, wearing a blue shirt and blue pants, with a speech bubble icon above his head.

Button 3 (Slide Layer)


The screenshot shows a slide titled "James Pauls" with the SCFFPCLearn logo in the top left. On the left side, there is a vertical toolbar with icons for home, back, forward, and user profile. The main content area features a yellow speech bubble with the text: "Well last week, I had to change the plates on the electric outlets of a whole section of the school. It became hard to turn the screwdriver very quickly. I don't know why, it just felt slow and difficult. Maybe I pulled something?". Below the bubble is the name "James". Underneath are three dark blue buttons: "Reason for Visit", "Your Response", and "History of Present Illness". At the bottom center is an orange button labeled "What do you think?". On the right side, there is a full-body illustration of a man with a beard, wearing a blue shirt and blue pants, with a speech bubble icon above his head.

1.2 Question

(Multiple Response, 10 points, 1 attempt permitted)

CFPCLearn

What conditions are in your early differential?



Select all that apply.

- Tendinopathy (e.g., tennis elbow)
- Myasthenia gravis
- Parkinsonism (Parkinson disease)
- Osteoarthritis
- Multiple sclerosis

Submit

Correct	Choice
X	Tendinopathy (e.g., tennis elbow)
X	Myasthenia gravis
X	Parkinsonism (Parkinson disease)
X	Osteoarthritis
X	Multiple sclerosis

Feedback when correct:

That's right! You selected the correct response.

Feedback when incorrect:

You did not select the correct response.

1.3 Answer

James Pauls

Answer: All conditions may be reasonable at this stage.

Click on the buttons to get more information

Broad Differential

Tendinopathy and Osteoarthritis

Myasthenia Gravis

Multiple Sclerosis

Parkinsonism

Let's Look at More

Keep it broad (Slide Layer)

James Pauls

Answer: All conditions may be reasonable at this stage.

Keep it Broad
There is little information on the case so far, so the differential is best kept very broad.

Broad Differential

Tendinopathy and Osteoarthritis

Myasthenia Gravis

Multiple Sclerosis



Parkinsonism

Let's Look at More

T&O (Slide Layer)

SCFPCLearn

James Pauls



Answer: All conditions may be reasonable at this stage.

- Broad Differential
 - Tendinopathy and Osteoarthritis
 - Myasthenia Gravis
 - Multiple Sclerosis
 - Parkinsonism

Tendinopathy and osteoarthritis



Tendinopathy and osteoarthritis do affect function, but the first or primary symptom for most patients is generally pain. If you did not include them, that is okay. However, they are far more common than the neurologic conditions listed, and unusual presentation of common problems are generally more likely than rare conditions.

[Let's Look at More](#)

MG (Slide Layer)

SCFPCLearn

James Pauls



Answer: All conditions may be reasonable at this stage.

- Broad Differential
 - Tendinopathy and Osteoarthritis
 - Myasthenia Gravis
 - Multiple Sclerosis
 - Parkinsonism

Myasthenia Gravis



Fatigability is a key feature of myasthenia gravis, and James might be describing this. However, myasthenia gravis has a very low prevalence (70-320 per million people).

[Let's Look at More](#)

MS (Slide Layer)

SCFPCLearn

James Pauls



Answer: All conditions may be reasonable at this stage.

- Broad Differential
 - Tendinopathy and Osteoarthritis
 - Myasthenia Gravis
 - Multiple Sclerosis
 - Parkinsonism

Multiple Sclerosis X



Multiple sclerosis is a relatively common neurologic condition (prevalence 0.27%, or 2,700 per million people) and can present many different ways. However, it is more common in females and often diagnosed earlier in life (average age approximately 30 but often before 45).

[Let's Look at More](#)

PD (Slide Layer)

SCFPCLearn

James Pauls



Answer: All conditions may be reasonable at this stage.

- Broad Differential
 - Tendinopathy and Osteoarthritis
 - Myasthenia Gravis
 - Multiple Sclerosis
 - Parkinsonism

Parkinsonism X

Parkinsonism (including Parkinson disease) has a prevalence of 0.3% to 0.48% (3,000–4,800 per million people) in patients older than 40, is more common in men, and generally presents in those 60 and older.

[Let's Look at More](#)

1.4 Conversation

The screenshot shows a digital learning interface for a character named James Pauls. On the left, there is a vertical sidebar with the 'CFPC Learn' logo and several icons. The main content area features the name 'James Pauls' in blue. Below the name, there are three paragraphs of text: 'James reports no pain and recalls no recent injuries. He does not get fatigued with most activities.', 'He has no trouble with vision and has no headaches. He walks without difficulty and is okay climbing stairs.', and 'He has no weakness, and reports he can move heavy boxes of cleaner without trouble.' Below the text are three buttons: 'More questions', 'James Responds', and 'Clarification'. At the bottom of the text area is an orange button that says 'You suspect Parkinson disease'. On the right side of the interface is a full-body illustration of James Pauls, a bald man with a beard, wearing a blue long-sleeved shirt, blue jeans, and yellow shoes. A speech bubble icon is in the top right corner of the illustration area.

Button 1 (Slide Layer)

This screenshot shows the same digital learning interface as above, but with a slide layer active. The slide layer is a light blue rounded rectangle that has partially covered the text area. Inside the slide layer, there is a yellow speech bubble containing the question 'Have you noticed any numbness?'. Below the speech bubble, the word 'You' is centered. The 'More questions', 'James Responds', and 'Clarification' buttons are still visible below the slide layer. The orange button 'You suspect Parkinson disease' is also visible at the bottom. The illustration of James Pauls and the sidebar remain the same as in the previous screenshot.

Button 2 (Slide Layer)

The screenshot shows a slide titled "James Pauls" from the SCFFC Learn platform. On the left is a vertical navigation menu with icons for home, search, a list, and a user profile. The main content area features a character named James Pauls, a man with a beard wearing a blue shirt and jeans. A text box on the left contains the following text: "No, but something kind of like that. My wife mentioned this morning at breakfast that my left hand has a small shake sometimes when I'm just sitting around. She wanted me to mention it." Below the text box are three buttons: "More questions", "James Responds", and "Clarification". At the bottom of the slide is an orange button that says "You suspect Parkinson disease".

Button 3 (Slide Layer)


The screenshot shows a slide titled "James Pauls" from the SCFFC Learn platform. On the left is a vertical navigation menu with icons for home, search, a list, and a user profile. The main content area features a character named James Pauls, a man with a beard wearing a blue shirt and jeans. A text box on the left contains the following text: "On further questioning from you, James denies any tremors when doing tasks or fine work." Below the text box are three buttons: "More questions", "James Responds", and "Clarification". At the bottom of the slide is an orange button that says "You suspect Parkinson disease".

1.5 Question

(Multiple Response, 10 points, 1 attempt permitted)

CFPCLearn

**You're concerned about Parkinson disease.
What are some helpful questions?**



Select all that apply.

- Is your writing getting smaller?
- Do you have any trouble with your sense of smell?
- Is there any weakening or softening of your voice?
- Are there changes in your hearing?
- Do you feel an electric shock sensation down your back/
into your limbs when you bend your neck forward?

Submit

Correct	Choice
X	Is your writing getting smaller?
X	Do you have any trouble with your sense of smell?
X	Is there any weakening or softening of your voice?
	Are there changes in your hearing?
	Do you feel an electric shock sensation down your back/into your limbs when you bend your neck forward?

Feedback when correct:

That's right! You selected the correct response.

Feedback when incorrect:

You did not select the correct response.

1.6 Answer

CFPC Learn

James Paul

Answer:

1. Is your writing getting smaller?
2. Do you have any trouble with your sense of smell?
3. Is there any weakening or softening of your voice?

Smaller Writing

Sense of Smell

Voice Changes

Other Symptoms

Continue to Further Investigations

Button Ad (Slide Layer)

CFPC Learn

James Paul

Answer:

1. Is your writing getting smaller?
2. Do you have any trouble with your sense of smell?
3. Is there any weakening or softening of your voice?

Smaller Writing

Sense of Smell

Voice Changes

Other Symptoms

Other symptoms
Changes in or loss of hearing is not associated with Parkinson disease.

Electric shock sensation down the back/into limbs when flexing the neck forward (Lhermitte sign) is a clinical finding in some patients with multiple sclerosis.

Continue to Further Investigations

Button 2 (Slide Layer)

SCFPCLearn

James Paul



Answer:

1. Is your writing getting smaller?
2. Do you have any trouble with your sense of smell?
3. Is there any weakening or softening of your voice?

Smaller Writing

Sense of Smell

Voice Changes

Other Symptoms

Smaller Writing


Smaller handwriting or handwriting that gets smaller as a person writes (micrographia) is associated with Parkinsonism (likelihood ratio 3 to 6).

[Continue to Further Investigations](#)

Button 4 (Slide Layer)

SCFPCLearn

James Paul



Answer:

1. Is your writing getting smaller?
2. Do you have any trouble with your sense of smell?
3. Is there any weakening or softening of your voice?

Smaller Writing

Sense of Smell

Voice Changes

Other Symptoms

Sense of Smell

Reduced sense of smell (anosmia) is associated with Parkinsonism (likelihood ratio approximately 5). Most studies used formal testing (e.g., University of Pennsylvania Smell Identification Test (UPSIT)).

[Continue to Further Investigations](#)

Button 5 (Slide Layer)

CFPC Learn

James Paul



Answer:

1. Is your writing getting smaller?
2. Do you have any trouble with your sense of smell?
3. Is there any weakening or softening of your voice?

Smaller Writing

Sense of Smell

Voice Changes

Other Symptoms

Weakening or Softening of Voice


Softening of the voice is associated with Parkinsonism (likelihood ratio approximately 2.5).

Continue to Further Investigations

1.7 Investigation

CFPC Learn


Investigation



James doesn't think his writing, sense of smell, or voice have changed.

You complete further investigations.

Click on the circles on the figure for physical findings.



Moving Forward

Button 2 (Slide Layer)

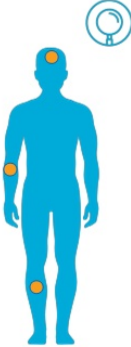
SCFPCLearn

Investigation

Central Nervous System X

He looks well today and you do not notice a tremor while chatting. His reflexes, sensation testing, cerebellar tests, and cranial nerves are normal.

Click on the circles on the figure for physical findings.



Moving Forward

Button 3 (Slide Layer)

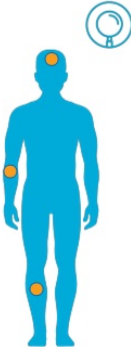
SCFPCLearn

Investigation

Gait X

His ability to climb out of a chair is normal. His gait appears normal, except you suspect his left arm is swinging less than the right. Repeating his gait, you confirm that his left arm is swinging less.

Click on the circles on the figure for physical findings.



Moving Forward

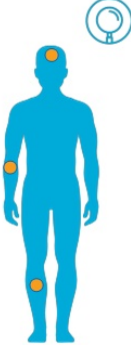
Button 4 (Slide Layer)

CFPCLearn

Investigation

Ability to Flex
Flexing and extending his arms at the elbow, you get a sense of 'clunking' or intermittent resistance; subtle on the right, more pronounced on the left.

Click on the circles on the figure for physical findings.




Moving Forward

1.8 Question

(Multiple Choice, 10 points, 1 attempt permitted)

CFPCLearn

What do you think?



Guess at the chance James has Parkinson disease (best approximation):

99%

50%

5%

Submit

Correct	Choice
	99%

X	50%
	5%

Feedback when correct:

That's right! You selected the correct response.

Feedback when incorrect:

You did not select the correct response.

1.9 Answer

The screenshot displays a user profile for James Paul. On the left, there is a vertical navigation menu with icons for information, a flag, a folder, a document, and a user. The main content area shows the user's name 'James Paul' at the top, followed by a circular profile picture and a gear icon. Below this, the text 'Answer: 50%' is displayed. A list of four dark blue buttons is shown: 'Diagnostic Probability', 'Diagnosis', 'Symptoms', and 'Additional symptoms'. To the right of these buttons, the text 'Click on the buttons for more information' is present. At the bottom right, there is an orange button labeled 'Let's Make a Plan'.

Button 2 (Slide Layer)

SCFPCLearn

James Paul

Answer: 50%

- Diagnostic Probability
- Diagnosis
- Symptoms
- Additional symptoms

Diagnostic Probability
Estimation of the probability of diagnosis is always difficult. However, 99% is not possible for the diagnosis of Parkinson disease. Five percent is likely too low as James has a number of positive features in his story/exam.

Let's Make a Plan

Button 3 (Slide Layer)

SCFPCLearn

James Paul

Answer: 50%

- Diagnostic Probability
- Diagnosis
- Symptoms
- Additional symptoms

Diagnosis
Early diagnosis is at best 65% (based on five years of clinical follow-up). Even after years of specialty care, diagnosis (confirmed by autopsy) was incorrect in 10% to 24% of cases.

Let's Make a Plan

Button 4 (Slide Layer)

SCFPCLearn

James Paul

Answer: 50%

- Diagnostic Probability
- Diagnosis
- Symptoms
- Additional symptoms

Symptoms
Reduced arm swing is the most common symptom of Parkinson disease, which can be bilateral or unilateral (particularly early). No likelihood ratio found.

Exam suggests rigidity, likely as cogwheeling (likelihood ratio 4.5).

Let's Make a Plan

Button 5 (Slide Layer)

SCFPCLearn

James Paul

Answer: 50%

- Diagnostic Probability
- Diagnosis
- Symptoms
- Additional symptoms

Additional Symptoms
The resting tremor noted by James' wife may be indicative of Parkinson disease (likelihood ratio 1.3 to 17, with lower value when used as the initial symptom).

Lastly, going back to his original story, having trouble using a screwdriver seems to reflect bradykinesia and may be similar to a "trouble opening jars" (likelihood ratio 6).

Let's Make a Plan

1.10 Create a Plan

Let's Make a Plan

Using what you have learned write a plan for the James. It can include any/all of the following: lifestyle intervention(s), prescription intervention(s), lab(s)/test(s) required, follow up appointment time frame, and referral required.

Fill in your plan for the patient here

See how your plan compares

1.11 Plan Answers

James Pauls

This is the proposed plan for the patient. How does your plan compare?

Additional Testing

Referrals

Additional considerations

Next Appointment

What's in a name?

Click on the categories to the left to see possible answers

Next Patient

Back to Day Sheet

Next Appointment (Slide Layer)

SCFPC Learn

James Pauls

This is the proposed plan for the patient. How does your plan compare?

- Additional Testing
- Referrals
- Additional considerations
- Next Appointment

What's in a name?

Next Appointment

You ask James to call you if he has not heard about the referral within a month.

Next Patient Back to Day Sheet

Additional (Slide Layer)

SCFPC Learn

James Pauls

This is the proposed plan for the patient. How does your plan compare?

- Additional Testing
- Referrals
- Additional considerations
- Next Appointment

What's in a name?

Additional



You ask James if he needs work accommodation. He tells you it is not required.

Next Patient Back to Day Sheet

Referrals (Slide Layer)

SCFPC Learn

James Pauls



This is the proposed plan for the patient. How does your plan compare?

- Additional Testing
- Referrals**
- Additional considerations
- Next Appointment

What's in a name?

Referrals



You advise James that features like his can be hard to confirm as an early diagnosis of neurological disease. You feel he needs to see a neurologist. You make a semi-urgent referral to neurology (one step faster than routine in your region).

[Next Patient](#) [Back to Day Sheet](#)

Additional Testing (Slide Layer)

SCFPC Learn

James Pauls



This is the proposed plan for the patient. How does your plan compare?

- Additional Testing**
- Referrals
- Additional considerations
- Next Appointment

What's in a name?

Additional Testing



Imaging does not confirm Parkinsonism, but you would like to rule out other possible causes and suspect the neurologist will as well. You order an MRI.

[Next Patient](#) [Back to Day Sheet](#)

Name (Slide Layer)

CFPC Learn

James Pauls



This is the proposed plan for the patient. How does your plan compare?

- Additional Testing
- Referrals
- Additional considerations
- Next Appointment

What's in a name?

Meaning Behind the Name:
James Pauls

James Parkinson was first described in 1817, in an article titled "Shaking Palsy" (Pauls).

Next Patient Back to Day Sheet