ASPIRATION PNEUMONIA/PARKINSON’S

MODULE: CORE MEDICINE: CARE OF THE ELDERLY

TARGET: FY1/2 CMT 1/2 (+NURSES, SALT, OT & PT)

BACKGROUND:

“Community-acquired pneumonia (CAP) is a major cause of morbidity and mortality in the elderly, and the leading cause of death among residents of nursing homes. Oropharyngeal aspiration is an important aetologic factor leading to pneumonia in the elderly. The incidence of cerebrovascular and degenerative neurologic diseases increase with aging, and these disorders are associated with dysphagia and an impaired cough reflex with the increased likelihood of oropharyngeal aspiration. Elderly patients with clinical signs suggestive of dysphagia and/or who have CAP should be referred for a swallow evaluation. Patients with dysphagia require a multidisciplinary approach to swallowing management. This may include swallow therapy, dietary modification, aggressive oral care, and consideration for treatment with an angiotensin-converting enzyme inhibitor.” Aspiration pneumonia and dysphagia in the elderly. Marik PE, Kaplan D. CHEST. 2003;124(1):328-336.

RELEVANT AREAS OF THE CMT CURRICULUM

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**LEARNING OBJECTIVES**

- Diagnosis and management of aspiration pneumonia
- Management of an inpatient with Parkinson’s disease
- Multidisciplinary team management of aspiration pneumonia
- Swallow assessment

**SCENE SETTING**

Location: Elderly Care Ward  
Expected duration of scenario: 20 mins  
Expected duration of debriefing: 40 mins

**EQUIPMENT AND CONSUMABLES**

- SimMan 3G
- Intravenous cannulation equipment
- IV Co-amoxiclav (or antibiotic as per guidelines)
- Drug chart
- GP prescription list / handwritten patient list of regular medications inc. anti-Parkinson’s meds
- Observation chart
- Chest XR - right basal pneumonia
- Glass of water by bedside
- Naso-gastric feeding tube
- Blood culture bottles
- Sepsis care bundle

**PERSONNEL-IN-SCENARIO**

- FY1/2
- CT1/2
- Staff nurse
- (Speech and language therapist)
- Health care assistant (can be faculty)

**PARTICIPANT BRIEFING**

Gladys Jones is an 81-year-old lady who was transferred to the ward from the admissions unit 3 days ago, after a fall at home. She did not sustain any fractures, but was deemed unable to manage at home by herself, and is waiting for a package of care to start. However, today the health care assistant has noticed that Gladys appears less well, and has a cough.
FACULTY BRIEFING

‘VOICE OF THE MANIKIN’ BRIEFING

You are Gladys Jones, an 81-year-old lady with Parkinson’s disease (PD). You have been fiercely independent up until you tripped and fell over some loose carpet in your hallway at home. You normally take Madopar 125 micrograms three times a day, for your PD at home. You see a specialist in clinic every 3 months for Parkinson’s. You have long-standing high blood pressure for which you take bendroflumethiazide 2.5mg once a day. You are allergic to Penicillin (it gives you a rash (if asked)). You live at home alone. You don’t really want carers at home. You have a daughter who lives 5 miles away. Since you’ve been in hospital you don’t think that you’ve been getting all of your Parkinson’s medications at the right times. If specifically asked - you have noticed that liquids and biscuits seem to “go down the wrong way”. You’ve been feeling progressively worse over the last few days, breathless and febrile. Your speech is slow and monotonous. If asked, you feel that this has got worse over the weekend, and that your Parkinson’s has not been well controlled since you’ve been in hospital.

If the candidate attempts a swallow assessment, your voice becomes “wet” (as if you still have fluid at the back of your throat), your cough is weak and ineffective.

IN-SCENARIO PERSONNEL BRIEFING

Health Care Assistant – You are novice but helpful, and are concerned about Gladys. She has told you that she doesn’t feel well, and has been getting feverish and breathless. If specifically asked, then say that you don’t think Gladys has been able to swallow properly, and hasn’t been managing her meals on the ward.

Speech and language therapist (over the phone) – You are helpful, but busy. You ask for information about the patient, and their history, then if asked to assess the patient, advise that you will be able to get down to the ward later today, and that it sounds like she will need a naso-gastric tube.

ADDITIONAL INFORMATION

List of medications:

Madopar (Co-beneldopa) 125mcg TDS
Bendroflumethiazide 2.5mg OD

Allergies: Penicillin (Rash)
CONDUCT OF SCENARIO

INITIAL SETTINGS
A: Patent, self-ventilating in air
B: RR 24, SaO2 89% RA, coarse crepitations at right lung base and midzone
C: HR 110 Atrial fibrillation, BP 116/78
D: GCS 15, pupils equal and reactive
E: Temp 38.6°C, tremor, rigidity,

INITIAL ASSESSMENT
High-flow O2, IV cannulation,
A: Patent
B: RR 20, SaO2 94% RA
C: HR 110 AF, BP 116/78
D: GCS 15, pupils equal and reactive

EXPECTED ACTIONS
IV cannulation,
O2 administration
Blood cultures
IV antibiotics for pneumonia
Consideration of PD meds
Consider NGT insertion
Consider cautious IV fluids
Order CXR

EXPECTED ACTIONS & CONSEQUENCES
• Referral to Speech and Language Therapist
• Administration of IV antibiotics
• Safe administration of anti-Parkinson’s meds
• Swallow assessment
• Consideration of NG tube insertion for feeding

INITIAL MANAGEMENT
A: Patent
B: RR 18, SaO2 95%
C: HR 110 AF, BP 116/78
D: GCS 15, PERLA

RESULTS/OTHER INFORMATION:
Hb 11.2
MCV 102
WCC 9.3
Neut 7.6
Lymph 0.8
Na 135
K 3.8
Ur 10.4
Creat 128
CRP 28.7
CXR - right sided pneumonia
ABG - pH 7.36
pO2 - 10.1
pCO2 - 4.2
BE - 6
Lactate 3.7

LOW DIFFICULTY
• Management of aspiration pneumonia
• Referral to SALT

NORMAL DIFFICULTY
• Management of aspiration pneumonia
• Consideration of mode of delivery of Parkinson’s medications
• Liaise with PD Nurse/Pharmacist

HIGH DIFFICULTY
• Unable to insert NGT
• Rigid without PD meds
• Liaise with pharmacy for alternate medications
• Patient also has severe depression

RESOLUTION:
IV antibiotics administered
Timely administration of PD medications
NG tube inserted
SALT review arranged
DEBRIEFING

POINTS FOR FURTHER DISCUSSION

Diagnosis and management of aspiration pneumonia
Management of an inpatient with Parkinson's disease
Multidisciplinary team management of aspiration pneumonia
Swallow assessment

DEBRIEFING RESOURCES

Nice Guidelines on Parkinson's disease
www.nice.org.uk/CG035

Parkinson's UK
http://www.parkinsons.org.uk/

KEY POINTS

Diagnosis and management of aspiration pneumonia
Management of an inpatient with Parkinson’s disease
Multidisciplinary team management of aspiration pneumonia
Swallow assessment

RELEVANCE TO THE CURRICULUM

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Geriatric competences

| Rationalise individual drug regimens to avoid unnecessary poly-pharmacy |
| Perform a nutritional assessment and address nutritional requirements in management plan |
| Recognise the importance of multi-disciplinary assessment |
| Recognise the often multi-factorial causes for clinical presentation in the elderly and outline preventative approaches |
| Recognise that older patients often present with multiple problems |

FURTHER RESOURCES

Nice Guidelines on Parkinson’s disease (www.nice.org.uk/CG035)
Parkinson’s UK (http://www.parkinsons.org.uk/)
PARTICIPANT REFLECTION

What have you learned from this experience? (Please try and list 3 things)

How will your practice now change?

What other actions will you now take to meet any identified learning needs?
PARTICIPANT FEEDBACK

Date of training session:.................................................................................................................................

Profession and grade:...........................................................................................................................................

What role(s) did you play in the scenario? (Please tick)

- Primary/Initial Participant
- Secondary Participant (e.g. ‘Call for Help’ responder)
- Other health care professional (e.g. nurse/ODP)
- Other role (please specify):
- Observer

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<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
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<td>I found this scenario useful</td>
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<td>I understand more about the scenario subject</td>
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Please write down one thing you have learned today, and that you will use in your clinical practice.

How could this scenario be improved for future participants?
(This is especially important if you have ticked anything in the disagree/strongly disagree box)
What went particularly well during this scenario?

What did not go well, or as well as planned?

Why didn’t it go well?

How could the scenario be improved for future participants?