Introduction

You have access to this bonus material because you completed the APC program. Use this material wisely and practise it enough so that you can personalise it according to your style and feel confident in your performance. Remember, you don't need much information about every possible scenario, you just need to follow the invincible framework that you've learnt in this course to pass the exam. Perform a quick and thorough interview and objective assessment, choose a small number of outcome measures strictly related to the goals, implement a basic treatment to improve those impairments. Stick to the plan and you'll pass.

The aim of this bonus material is to add specific information related to the cardiorespiratory assessment, not to replace the framework you've learnt in the modules of the course! The details below often repeat the concepts outlined in the APC modules, so please implement this information wisely to suit your own framework so that you can apply it to the cardiorespiratory exam.

Subjective

The main aim of the subjective assessment is to confirm all the information you read in the clinical notes with the patient. Also, you want to ask information that you need and wasn't mentioned in the notes. All the time you'll be summarizing the information you have speaking to the patient and looking for confirmation, using structures such as: "So, you fell on that day, right?" Ask yes or no questions for the information you don't have. Always get down to the patient's level, whether they're sitting or lying down, as it's not polite to be towering down on them while standing up.

Consider that in the cardiorespiratory scenario it's very common for the patient to be short of breath or in pain, so you might want to decide to perform a less in-depth interview, ask closed-ended questions or skim through the less relevant questions, only to spare your patient the discomfort. If so, always remember to verbalise what you're doing, to make sure the examiners are aware of it, as they may think you forgot to ask valuable information and therefore marking the first domain with NO.

Use the cheat sheet guide explained on the course and modify it considering the additional information given in this bonus material; therefore, remember to plan the 4 pause moments, to use the vocabulary of the performance indicators, to write the additional words in the cheat sheet... All those tips are still essential!

INTRO

“Hello, how are you doing?” Wait for answer.

“My name is Carmelo and I’ll be your physiotherapist. I read your file and I understand in general your situation. I would like to see what you can do and what things you might need assistance with. I’ll explain things as we go, but please ask me if you don’t understand me at any time so I can explain. Also please tell me if you get short of breath or uncomfortable for any reason.”

“These are my examiners, and they will be observing the sessions today. Is that all right with you?”

“Can you see me and hear me clearly? Can you confirm your name? Is the volume of my voice all right?”

If you’re in an acute scenario, check orientation (time of day and place) and make them more comfortable by raising the head of the bed with the remote.

If PCA is present, ask to use it at the beginning, explain also: “It will start kicking in as I ask you a few questions, so that later is going to make our first session easier.” If 02 support is present, verbalise that you’re checking its level and that corresponds to the information in the file.

MOI/HISTORY

Always consider pain and SOB: if present, quickly confirm information from file and go on.

MAIN CONCERN

1. SOB: 0-10, agg/ease, relation, irritability, constant/intermittent, 24h.
2. Pain: follow the MSK structure; usually pain is located on the chest, and is related to breathing, cough and movements.
3. Cough: 0-10 (if painful), frequency, effectiveness, changes with am/pm/temperature, changes between chronic/current.
4. Sputum: amount, frequency, colour, thickness; if your patient is in an acute scenario and has thick sputum, verbalise that you’ll refer them to a nurse to enquire about a a nebulizer.

If relevant, you can ask sections of FATMAT, especially around functional ability now and before the MOI (ADLs, aids assistance, toilet).

PAST MED HOUSE WORK SOCIAL

SPECIAL QUESTIONS

In addition to the red flags described in the APC modules, remember to ask about smoking, presence of wheezing and DVT (pain, swelling and redness in the calf). Ask for sensation loss if your patient had an epidural.

SHORT

“What would you like to achieve today?” If your patient is unable to talk or to fully have this conversation, propose your ideal goals and ask to agree.

LONG

“What would you like to be able to do in few months from now?” You can use information from pre-morbidity mobility and hobbies.

ADDITIONAL WORDS

Objective

ENVIRONMENT

Verbalise that you’re looking at the external attachments, one by one.

- Underwater seal drainage/ICC (should have two pipes connected, verbalize that you’re looking for normal swing and intermittent/no bubbling).
- Oxygen cannula or mask (and correct volume of oxygen).
- PCA, epidural, IV line, urinary catheter
- Pulse oximeter, BP cuff

VITALS

HR, BP and PaO2 are safety factors that you might have to assess multiple times during the assessment.

- Check for saturation and heart rate placing the pulse oximeter on.
- Check the blood pressure monitor (place the cuff in the right position, if it’s not in place yet)
- Check pulse and respiratory rate for 1 minute.

Use the equipment correctly and ask examiners every time you use it what the values displayed are. During the assessment (and treatment), at regular intervals ask your patient about their level of discomfort, dizziness, pain or SOB and whether they’re dizzy, especially after exertion or transfers. If it’s increased, give them a few seconds to rest, while you keep checking on the pulse oximeter. If the

patient feels worse or the value of the pulse oximeter is lower, you must wait longer in a safe position.

OBSERVATION

Verbalise your observation from head to toe:

1. Facial expression, puffiness, discoloration, nasal flaring, accessory muscles/supracavicular hollowing
2. Upper chest breathing, lower ribs movement and epigastric excursion, indrawing and chest shape in COPD
3. Hands swelling, clubbing and tremor.
4. DVT checklist and pitting/non-pitting oedema.

In a post-operative scenario, check bandages and oozing, but you must not open bandages.

CHEST EXAMINATION

Ask for permission to place your hands on the patient's lower ribs, with your fingers pointing laterally and your thumbs cranially. Verbalise you're looking for limitation in the inspiration, asymmetry of movements and fremitus. Ask your examiners whether there's any and listen to their answer.

Ask for permission to perform the auscultation.

1. "Please breathe in and out comfortably from your mouth."
2. 6 points anteriorly: check the apex bilaterally, then the middle bilaterally, then the lower lobes bilaterally.
3. 6 points posteriorly: check the apex bilaterally, then the middle bilaterally, then the lower lobes bilaterally.

The patient can sit up with their back supported by the bed (lift the bed head with the remote) for the anterior auscultation, but then has to move to SOEB to proceed with the posterior auscultation.

COUGH

Give your patient a tissue, then ask to cough as hard as they can. Ask your examiners if you can see any phlegm in the tissue and listen to their answer.

FUNCTIONAL STRENGHT

1. Upper limb: grip and elbow extension
2. Lower limb: Bridge, SLR, ankle PF/DF (do not ask SLR or hip F to post-operative patients with abdominal surgeries).
3. Bed mobility, transfers, STS, walking.

Remember!

- Instruct the assistant about exactly what to do at all times.
- Prepare chairs and safety, use height of bed at your advantage.
- If very SOB, skip through subjective and ask only yes/no question.
- In POST-OP, the aim is always to mobilize.

Outcome measures

Before the treatment, make sure the environment is safe for you and your patient, therefore check bed brakes, shoes, assistant requirements as per patient's file. Also, place catheters and attachments out of your way, according to the movements you and your patient are going to do. If the patient has oxygen therapy and you're considering to mobilise out of bed, you'll require the portable oxygen bottle (you can also take it straight after the presentation).

The information in the APC cardiorespiratory bonus material is meant to give you a basic approach to the common impairments that you'll find the cardiorespiratory scenarios. The treatment information below is not meant to be comprehensive or up-to-date with the latest EBP practice. I strongly recommend to consult your cardiorespiratory physiotherapy manuals to consolidate your preparation about specific pathologies, surgical procedures, equipment and treatments.

- Pain

Relaxation techniques such as breathing control and bracing techniques can help decrease pain.

- Cough

Active cycle of breathing techniques, mobilisation and positioning can help cough. Positioning and bubble PEP can help patients to dislodge phlegm.

- SOB

Active cycle of breathing techniques and pursued lip breathing can help SOB.

Do not use an incentive spirometer in abdominal post-operative scenarios. You can prescribe it for reduced chest expansion or reduced breath sounds, especially for pneumonia and atelectasis.

- MOBILITY (in/out bed, walking, distance walked, exercise tolerance)

Mobility is always a goal in post-operative scenarios. Upper and lower limb graduated exercise, positioning and walking are effective methods to improve mobility.

- EDUCATION

All cardiorespiratory scenarios require you to be understanding of your patient's discomfort and capabilities; be kind with your words and positive in your attitude, but respecting their level of pain or SOB.

Education

Here you can find basic sentences that are commonly used to educate patients in a cardiorespiratory scenario. It's important to teach why physiotherapy is important in a cardiorespiratory patient, always referring back to their needs and goals.

COUGH

"Take a deep breath, hold for a second, then push with your stomach muscles and cough."

PURSUED LIP BREATHING

"Breathe in through your nose, keep your lips close and tight as if you wanted to blow candles, push the air out letting your cheeks fill up."

UPRIGHT POSITION/MOBILISATION/FORWARD LEAN SITTING

"It's important because your lungs are in a better position and they can catch more air and oxygen, this way the air can get underneath the phlegm and push it up. At the beginning is going to be hard, but it'll get easier and easier. It'll help you go home."

HUFF

Start with abdominal breathing. After 3 breaths, take a deeper breath and push with your stomach muscles, as if you wanted to say WHO. It sounds like this.

MOTIVATION TO EXERCISE

Moving, especially walking, makes you use the big muscles of your body, which require oxygen as fuel to work. This will make your lungs and heart work more efficiently, and will make them stronger, reducing the SOB.