PHA 6020Y

Pharmaceutical care planning for Parkinson's Disease

ANSWERS

Learning Outcomes

By the end of this workshop, you will be able to:

- Describe the thoughts, feelings and experiences of a carer responsible for supporting a person with Parkinson's.
- Use your clinical knowledge to identify and resolve pharmaceutical care issues for a person with Parkinson's.

Method

Ask students to sit in their TBL groups

The workshop consists of three tasks:

Task 1	Q&A session with a carer for a person with Parkinson's	40 minutes
Task 2	Pharmaceutical care planning **(Completed in advance of workshop)**	30 minutes
Task 3	Team exercise- complete MCQs	30 minutes
Summary		10 minutes

Task 1: Q&A session with Parkinson's patient

*****Preparation completed prior to workshop*****

A retired nurse who cared for her husband with Parkinson's will be attending the workshop. Below is a brief testimonial account of her experiences:

Context

My husband P. was diagnosed with Parkinson's in 2003 & passed away in 2011. I am giving my experience of living and caring with someone who had Parkinson's.

As a carer, whilst my aim was always to ensure P was as independent as possible, in the later years when the disease progressed at a faster rate, his needs became greater and my role as a carer became more intense.

Background history of ourselves

P was always in good health – attendance at our GP practice was rare.
P was the eldest of 6 children.
He was self – employed – sole trader– running a worldwide business - building, designing underwater equipment for the oil industry & providing training to workers offshore around the world.
He was a very confident person. Both of us looked after his mother for several years, who had Parkinson's and Lewy Body Dementia, until her death in 2003

In 2003 P went to see his GP because of the difficulty he was having forming chords when playing his guitar – having played it since 16yrs old. His GP referred him to a neurologist at Addenbrookes who diagnosed Parkinson's. P was 53 years old when diagnosed this was also the year that his mum died

P was very stoical and carried on, never complained about his illness but got very frustrated when his symptoms restricted some activities. I had experience in a caring role as a registered nurse and had spent 34 years working in the NHS at the point P was diagnosed.

On reflection the symptoms that were apparent before P's diagnosis were:-

- Loss of smell
- His writing was very small

•Problems with his stomach - GP investigated stomach ulcer

•Constipation

•Often knocking into/ against things/ clumsy

•Not swinging arms when walking

Caring for someone with Parkinson's

Whilst I took on the role willingly, the fact is I too suffered significant loss in terms of opportunities and the future they we had planned.

As a carer I needed factual, credible information and support as much as the person afflicted by Parkinson's disease. Some of this was provided by our families, the local branch of the charity Parkinson's UK PUK, their carers group provided tips and hints on managing some of the challenges and other support came from the local neurological/ multidisciplinary team. Communication and negotiation skills were particularly important in order to balance the needs of both P and myself. I was also aware of the need to look after my own health by getting enough sleep and exercise which was not always possible and I would cancel dentist appointments etc. simply because I could not leave P alone or his condition on the day limited his ability to move easily.

When first diagnosed I didn't worry about immediate incapacity as I thought it would have a slow progression and it would be a while before he would need high levels of care & he may never need the highest level. Both of us kept busy working.

I was still working full time and had not contemplated leaving work/ retiring for a few years. As the disease progressed at a faster pace than I had anticipated I decided to leave work the plans we had made for the future now changed. The post I was in required me to give 6 months' notice to my employer – so predicting the right time to do this was very difficult. Both of us faced a different retirement from the one we had expected.

I don't mean luxuries in any kind of material sense, but luxuries in the terms of just the things we wanted to do together and share together. So as time went on I spent a lot of time kind of worrying about, "How will I approach him giving up his business. How will we wind it up? Will he have the energy capacity and memory to do this or help me to do it? He was very reluctant to let it go. What were the risks of making faulty equipment that could endanger others' lives? What were his vulnerabilities? What were the financial consequences? What other symptoms was he experiencing and afraid to share and what symptoms lay before him? What would he be like if he just couldn't do things? How will he manage to make himself understood?

As we were both aware of the mental health decline in his mum, how would P cope with that? Was there a risk of suicide?

It would have helped me hugely during that time to feel like I could just have gone and talked to somebody who had opened the door to saying, "Do you want to just come in and talk about how you feel or what you're worrying about? Even just knowing then that I could have gone back, and maybe said, I don't think I needed a huge amount of help, but I do think it would have made a huge difference if I could just have talked to somebody at that time.

Long before there were serious physical needs, I had to learn the difficult balance between the desire to help against the perceived value of encouraging independence. I suppressed any fears about the future in an attempt to keep P from descending into depression.
I did not want to interfere, seem bossy or cause him further worry and anxiety but all the time had to weigh up just how much to do for him and how much to leave to him to get on with doing things. We usually saw his consultant and professionals together as P sometimes had difficulty expressing himself. Initially he wasn't owning up to his doctor about all the problems he was having so after discussion with him we agreed how we would manage this and would have several discussions leading up to his appointments. I contributed with my observations, and we agreed a list of symptoms/ difficulties we would discuss with the professionals in the hope it might possibly make a small difference to his treatment and maximise the 10-minute session we had with the Doctor. This did help with his drug regimen in a way that improved the control of his symptoms. Getting the right medication and adjusting dosages & timings was necessary.

As the illness progressed P needed help with such things as bathing, dressing, cutting up food and mobility.

Whenever medication was changed he would get much worse for a few days. Even switching from tablets to capsules of the same strength caused some confusion as the later stages of the disease and required a lot of time, patience and persuasion for him to take them.

With your group, plan **one question** that you would like to ask the carer during the workshop. Please add this to the Padlet by the **28th of February 2024**. The Padlet link is on Blackboard. Please include your group name in your post.

Please read the other questions posted to confirm you are not duplicating - if another group has beat you to the same question you will need to write a new one. (You might like to plan one or two spare questions just in case another group has chosen the same/similar question).

Notes:

(40 minutes of Chris answering the questions)

Task 2: Pharmaceutical care issues in Parkinson's Disease

*****Preparation completed prior to workshop*****

Mr AB is admitted to the acute medical unit after a fall. His GP repeat medication list is provided below, and his inpatient drug chart is provided on Blackboard. His wife confirms that he takes his medication as per the GP medication list.

Mr AB repeat slip January 2024

Current medication:

- Sinemet 12.5/50 2 tablets TDS at 06:00, 12:00, 18:00
- Half Sinemet CR 25/100 ON
- Aspirin 75mg OM
- Simvastatin 20mg ON
- Salbutamol 100mcg Evohaler® PRN
- Tamsulosin 400mcg OM

Recently discontinued:

- Sinemet 12.5/50 1 tablet TDS at 06:00, 12:00, 18:00

1. Identify any discrepancies between the drug chart (on Blackboard) and repeat medication slip.

- Simvastatin prescribed OM rather than ON (Q 1)
- Tamsulosin prescribed in mg not mcg (Q 2)
- Sinemet = co-careldopa NOT co-beneldopa (Q 3)
- Pt normally takes normal release Sinemet 125mg (2 x 62.5) TDS and MR at night-time.
- Morning dose prescribed at 08:00- should be 06:00

Starting dose of Sinemet is usually 125 mg TDS (100mg L Dopa & 25mg carbidopa)
If changing from different levodopa, discontinue at least 12 hours (24 hours for slow-release preparations) before starting therapy. The easiest way to do this is to give 'Sinemet' as the first morning dose after a night without any levodopa.

2. Identify any other pharmaceutical care issues associated with his current drug chart.

- Metoclopramide charted TDS PRN and doses given (contraindicated in Parkinson's) (Q 4)
- Need to select an alternative anti-emetic i.e., domperidone. Most others e.g., prochlorperazine and metoclopramide are DA antagonists. (Q 4)
- Day 1- 08:00, 12:00 dose of co-beneldopa not given (4 indicates no stock)

- What is the indication for aspirin?

3. You have a discussion with Mr AB's wife, as she is concerned that since increasing his dose of Levodopa therapy, he has been feeling dizzy and nauseous. Summarise an appropriate management and monitoring approach in response to this information.

Nausea, vomiting and orthostatic hypotension are the most commonly encountered side effects of levodopa therapy. These adverse events may be circumvented by increasing the levodopa more slowly or co-prescribing domperidone.

Levodopa therapy stimulates dopamine receptors found in the peripheral areas of the gut and vomiting centre. Metoclopramide is contraindicated in PD as it blocks dopaminergic transmission. Suggest domperidone 10mg TDS as alternative antiemetic if necessary (domperidone also reduces dopaminergic transmission but does not pass the blood brain barrier therefore safe to use in PD).

This patient would benefit from referral to a Parkinson's/ neurology specialist. It is likely that the patient may have developed postural hypotension as a result of the increased levodopa dose from 50mg to 100mg at 06:00, 12:00 and 18:00. We could suggest reducing to his original dose of 50mg TDS and increasing by 50mg a day (i.e. - initially 100mg at 06:00, 50mg 12:00 and 18:00 for example).

Tamsulosin also causes postural hypotension – you may suggest that the doctor reviews this for ongoing suitability.

4. During his admission, Mr AB is therefore referred for assessment by the speech and language therapist (SALT). SALT recommends thickened fluids and pureed meals. Summarise below your recommendations for the FY2 regarding how best to manage his Parkinson's medication.

LINK: OPTIMAL Calculator

Co-careldopa tablets are dispersible in water – so thicken fluid as necessary

5. Non Parkinson's medications

Stop statin

??Aspirin – stop/dispersible

Domperidone is available as suspension.

6. Mr AB is becoming increasingly agitated and confused has removed his nasogastric tube multiple times so the decision is made to convert his oral Parkinson's medications to a transdermal patch. Use the OPTIMAL Calculator 2, for patients who cannot have an NG tube to calculate a suitable dose of Rotigotine patches.

LINK: OPTIMAL Calculator