THE BRITISH PAIN SOCIETY

RCGP Royal College of General Practitioners

CASE STUDY

A case of neuropathic pain

The aim of this case study is to provide a template for the assessment and management of peripheral neuropathic pain (as an example of persistent pain) in a primary care setting. As you have limited time, we have provided some tips that you may find useful and we have sign-posted further resources (using this symbol ▼). The pain consultations can be undertaken separately or in tandem with your management of the case study's other health problems; diabetes, obesity and potential for further cardiovascular problems, but it must be done as part of the holistic management plan.

Mrs DN is a 61-year-old married lady with type 2 diabetes (10 year history) and controlled hypertension (20 years history) (1) ▼. At presentation, Mrs DN is morbidly obese (BMI 41), reports undertaking little exercise and not being able to lose weight. She has OA of the knees, bilateral ankle oedema and takes occasional paracetamol and regular diclofenac for pain. Present complaints are of pain in both feet causing difficulty in walking, poor quality sleep and feelings of despair. Mrs DN finds it increasingly difficult to get out and about and is becoming more and more dependent on her family.

Key messages

- *Managing the process – several 10-minute consultations will be necessary*
- *Use available diagnostic tools*
- *Acceptance by the patient that management, not cure, is the goal*
- *Patients as partners*
- *Holistic, multiprofessional approach to assessment and management (biopsychosocial approach)*
- *Establishing how and when the patient should consult with his/her GP*

First pain consultation

Mrs DN presents with pain and will require reassurance that you are there to help. It may take time as it is not always possible to reach a diagnosis and treat within the first consultation. You know that there could be a number of causes for her pain so you take a history and explore her feelings and concerns. You undertake a brief physical examination to rule out red flag

pathology (ischaemia, infection, inflammatory arthritis, etc) and plan to examine her in more detail when she returns the next time. You request a number of blood tests (FBC, HBA1c, biochemistry, ESR, etc). Given that Mrs DN is reporting feelings of despair, you decide to assess her for depression on the Patient Health Questionnaire (PHQ9) (2) ▼ and Hospital Anxiety and Depression Scale (HADS) (3) ▼. Mrs DN is invited to return to see you within the next couple of days, with her completed questionnaires, for a more detailed examination, to obtain her blood results, to discuss a possible explanation for the pain and agree a plan of action.

Examination

- *No musculoskeletal (apart from existing OA knees) or vascular abnormalities*

Diminished:

- *touch perception (cotton wool test - dynamic);*
- *pin prick perception (Neurotips);*
- *proprioception in a sock distribution in both feet.*

Second/third pain consultation

The blood tests indicate CKD stage 3 (which is stable) but otherwise are normal and the diabetic control is satisfactory; alongside managing her other health problems, you continue exploring the actual pain with Mrs DN. Having excluded other causes for the pain (OA, macro or micro vascular disease for example) you focus on her pain history and it appears to be neuropathic in origin. Her depression scores are high, indicating that this is a significant problem, and you consult NICE guidelines as an evidence-based approach to managing this depression (4) ▼. You decide to use a neuropathic pain assessment tool, not only to reinforce your diagnosis, but also to guide treatment and assess efficacy. You have a range of tools available to you, including: Leeds Assessment of Neuropathic Symptoms and Signs Scale (LANSS); Douleur Neuropathique (DN4); PainDetect; and Neuropathic Pain Scale (NPS) (5) ▼. You explain in simple terms the mechanisms of neuropathic pain and how it is possible to have both pain and numbness in the same area (6) ▼.

Pain history taking that suggests a diagnosis of neuropathic pain:

- ***Onset?*** *Gradual*
- ***Nature of the Pain?*** *Spontaneous stabbing pain, burning, tingling and numbness and/or hyper-sensitivity*
- ***Intensity?*** *Severe*
- ***Diurnal variation?*** *Continuous throughout the day but worse in the evening and occurs at night*
- ***Site?*** *Both feet and ankles (sock distribution – not dermatomal)*
- ***Relieved by?*** *Current medication, hot and cold packs and other remedies have not been effective*
- ***Made worse by?*** *Fatigue and stress*

Management plan

- Establish if there are local guidelines on neuropathic pain and start a tricylic drug at a low dosage. For example, nortriptyline 10mgs in the evening (you can use amitriptyline but this is more sedating) (4,7) ▼. NB CVS effects of prescribing tricyclic drugs.

- Advise Mrs DN that this is a trial of therapy and that the medication may take a week or two to be beneficial.

- Explain side effects and the need to increase the dose gradually, on a weekly basis up to a usual maximum of 50mgs.

- Provide some advice on pacing of activities and on using these to improve quality of life (see box) and refer to a health trainer who has a good track record for assessing and managing motivational issues with regard to activity and food.

- Explain that the goal is management of the pain (and not a cure) and involve the primary care team in education, supporting self-management strategies and evaluation.

- Provide information on self management (8) ▼.

Mrs DN is given a pain diary to record a pain score three times a day using a scale of 0 (no pain) to 10 (worst possible pain) (9) ▼. She is also asked to record daily 'happy' or 'sad' events that affect her mood to highlight the effects emotions have on pain. Mrs DN is asked to return in three weeks. The practice nurse is involved in Mrs DN's ongoing diabetic care and weight loss programme and will provide support and advice.

Fourth pain consultation

Mrs DN returns with her pain diary, her pain scores are unchanged and she appears distressed. She still believes that if she walks the pain will become worse and equates this with further harm, despite the input and ongoing support of the primary care team. She doesn't understand her loss of balance and believes that the pain is going to get progressively worse and she will end up in a wheelchair. Her family are also very anxious. At this stage, it is clear that Mrs DN has a combination of psychological distress, significant disability and severe pain. She has significant 'yellow flags' (psychosocial predictors of pain related disability) (10) ▼ and using the Department of Health's 18-week Commissioning Pathway for Chronic Pain (11) ▼ you

Tips on providing pacing activities

- *'You won't make your pain worse by doing something'*
- *'Go out of the house but use a stick or other support if you can't feel your feet'*
- *'Set yourself small tasks every day; rest in between'*
- *'Don't overdo it on good days as you may regret it later'*
- *'Make a positive effort to keep in touch with friends and family'*
- *'Do something you enjoy at least once a week'*
- *'Always have something to look forward to'*
- *'Think about what you can do; build on this rather than what you can't do'*

Yellow flags

- *Beliefs about pain and injury*
- *Unhelpful pain beliefs*
- *Unhelpful coping strategies*
- *Psychosocial distress*
- *Adopting the sick role*
- *Passive role in recovery*

Triggers for referral to a specialist pain service; the 4 Ds

- *Disability*
- *Distress*
- *Diagnostic difficulties*
- *Drug problems*

decide to refer her onto a specialist pain service. In the interim period, you add in gabapentin (or pregabalin) according to the guidelines available (dose adjustment required given CKD) (7) ▼, warning her that this may cause weight gain if taken for a prolonged period.

1 NICE Guidelines Type 2 Diabetes: www.nice.org.uk/Guidance/CG66
2 PHQ9: www.patient.co.uk/showdoc/40025272/
3 HAD: www.patient.co.uk/showdoc/40002439/
4 NICE Guidelines on Depression: www.nice.org.uk/CG023
5 Review of assessment tools: www.neurology.wisc.edu/publications/07_pubs/Neuro_7.pdf
6 PPT presentation: neuropathic pain physiology (exact link to be confirmed) www.britishpainsociety.org
7 Neuropathic pain guidelines for use in primary care: www.mgp.ltd.uk
8 Self help resources: www.action-on-pain.co.uk, www.painconcern.org.uk, Overcoming Chronic Pain (2005) IBSN: 978-1841199702, Coping successfully with pain (2002) IBSN: 0859698505
9 Pain diary: http://www.americangeriatrics.org/education/daily_pain_diary.pdf.
10 Yellow flags: http://www.hnehealth.nsw.gov.au/__data/assets/pdf_file/0006/28167/Guideline_CBT.pdf
11 Commissioning pathways: www.18weeks.nhs.uk, http://new.wales.gov.uk

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