Fact sheet  Patient Information

Adverse effects due to long term opioids

This information is intended as a general guide only. It is intended for patients who have been prescribed Opioids for their pain condition. Please ask your doctor if you have any questions about the information below.

The Opioid drugs include the following
1. Morphine – MS Contin, Kapanol, Ordine, MS Mono, Anamorph
2. Oxycodone – Oxycontin, Endone, Targin, Oxynorm
3. Methadone - Physeptone
4. Fentanyl – Durogesic patch, Denpax patch
5. Buprenorphine – Norspan patch
6. Hydromorphone – Jurnista, Dilaudid

How effective are these drugs in the management of chronic pain?
The use of long-term opioid therapy for patients with chronic pain continues to increase. Opioid therapy was once confined largely to patients with cancer pain. Despite a substantial increase in the prescription of opioids, there remains a lack of data regarding the long-term opioid effects. There is limited evidence regarding the long-term benefits and evidence of harm associated with daily use of opioids.

Opioids only work in a third of people who take it for chronic pain and at best allow only a 30% reduction in pain intensity. However in low doses if it leads to an improvement in function and quality of life, it can be used for a limited time period.

What are the risks due to opioids?
Opioid use and dependence are associated with significant medical and psychiatric co-morbidities, as well as adverse social, familial, vocational, and legal consequences.

The increase in opioid prescribing has been accompanied by simultaneous increases in abuse, serious injuries, overdose deaths as well as unexpected deaths among individuals taking these drugs.

The following risks are involved:
1. Deaths (both explained and unexplained) from opioids are a serious and increasing issue.

2. Respiratory: Opioids can suppress breathing effort, cause drowsiness and disturb sleep. Opioids worsen obstructive sleep apnoea and formal sleep studies are recommended for anyone on more than 150mg morphine equivalent per day.

3. Hormonal suppression leading to inappropriately low levels of gonadotropins (follicle stimulating hormone and luteinizing hormone) and inadequate production of sex hormones, particularly testosterone. Symptoms that may occur include reduced libido, erectile dysfunction, fatigue, hot flushes, and depression. Physical findings may include reduced facial and body hair, anaemia, decreased muscle mass and weight gain. Additionally, both men and women may suffer from infertility.

4. Osteoporosis: Decreased levels of sex hormones can lead to osteoporosis and higher risk of spontaneous fractures and fractures after minimal trauma and falls.

5. Constipation: Although stool softeners and laxatives can help improve the constipation this side effect will not resolve and is the most common reason for discontinuation of opioid therapy.
6. “Opioid Induced Hyperalgesia”: When a patient takes opioids for pain they may become more sensitive to a certain painful stimuli. The cause of this is poorly understood but it is believed to be a result of peripheral and central nervous system changes which leads to “sensitization” of pain pathways. Many patients find it hard to understand why being on opioids can increase pain and reducing the dose helps. Increasing evidence points at this being the case, particularly if the doses are high or opioids have been taken for a long time.

7. Tolerance: Tolerance occurs in patients taking opioids chronically (long-term). With increasing duration of opioid therapy, the patient's body becomes used to the medication so a higher dose of medication is needed in order to achieve the same pain relief as the previous dose. Most side effects of opioids are dose related and so increasing dosages will lead to a higher incidence of side effects.

8. Physical dependence: Dependence occurs in all patients using opioids for a prolonged period and is characterized by withdrawal symptoms when the opioid is stopped abruptly or the dose is decreased rapidly. This is not addiction.

9. Addiction is rare. The need to continue using a drug despite knowing its harmful effects, and the abnormal behaviour associated with obtaining the drug. The risk of criminal activity and legal consequences becomes greater as addiction becomes more severe.

10. Neurological: Opioids can interfere with your thinking, memory and concentration. Sedation and dizziness can occur if opioids are taken with other sedatives like Diazepam [valium], alcohol and marijuana. This can lead to imbalance or unsteadiness in posture and falls, which can in turn result in fractures. Driving can be also dangerous under these circumstances and a formal driving test is recommended for patients using more than 200mg morphine equivalent per day.

11. Immune Suppression: Opioids can lead to increased risk of infection as they suppress your immunity, especially in people prone to infection.

12. Dental caries may be caused, or exacerbated, by extended treatment with opioids as these drugs reduce saliva flow. Adopting good oral hygiene is important.

13. Falls: There seems to be a higher likelihood of having a fall and consequently sustaining a fracture, especially when you take opioids in conjunction with other sedating agents like diazepam. Elderly patients at doses more than 50mg morphine equivalent per day are particularly at risk.

14. Mood: Opioids can blunt your mood, your zest for life, and contribute to you failing to engage in beneficial and life-enriching activities. This might lead to your pain controlling you, and not the other way round.

15. Other effects on your body: If you have breathing problems, heart arrhythmias, kidney problems and gastrointestinal problems you need to be particularly careful about the type and dose of opioid used. Speak to your doctor.

**Safety Measures recommended:**

1. Minimise the duration and the dose of opioids. Many pain specialists recommend less than 100mg morphine equivalent per day for less than 90 days.

2. The period of taking opioids should be used to increase your daily activity and functionality, engage in exercise and improve muscle...
strength. If opioids are not helping to achieve this, then the harm is likely to be exceeding the benefit.

3. Do not use opioids with a daily equivalent value of more than 100mg of oral morphine per day. It is unlikely that more than this will be of any additional benefit. Ask your doctor how much your medication is worth and consider weaning down.

<table>
<thead>
<tr>
<th>Equipotent Value of</th>
<th>Fentanyl patch Durogesic</th>
<th>Oxycontin Targin</th>
<th>Buprenorphine Norspan patch</th>
<th>Kapanol MS Contiin MS Mono</th>
<th>Jurnista Hydromorphone</th>
<th>Methadone</th>
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<tbody>
<tr>
<td>100mg morphine per day</td>
<td>25mcg/ hr</td>
<td>60mg per day</td>
<td>40mcg/hr</td>
<td>100mg/ day</td>
<td>20mg</td>
<td>Variable</td>
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*Speak to Specialist

4. Ask yourself if you have any of the side effects. Consider weaning, or ask your doctor about rotating to another type of opioid with less daily oral morphine value and therefore fewer side effects.

5. **Do not mix other sedative medications with opioids eg valium, antihistamines, alcohol and cannabinoids.**

6. If you have been on long term opioids ask your doctor to check your sex hormone levels and bone density.

7. If you have sleep apnoea this is worsened by opioids. Wear your machine to sleep. If you are unsure whether you might have sleep apnoea, ask your partner if you snore or breathe unevenly in your sleep and discuss further with your doctor. Above 50 mg Morphine ask your general practitioner for a formal sleep study.

8. It is your responsibility to store and dispose of your medication safely. Opioids can be fatal if taken by children. If it is known you are taking opioids you could be a target for drug-seeking individuals.

9. Opioids are a minor part of the treatment of chronic pain. Do you have a sort of pain doctors refer to as neuropathic pain that responds better to other sorts of medication? Have you been referred for physiotherapy? Have you had pain-orientated psychology?

**More Information about living with Chronic Pain**

Have you read books to help you take control?

Good books to read are:
- “Manage Your Pain” by Dr Michael Nicholas, Dr Allan Molloy, Lois Tonkin and Lee Beeston
- “Explain Pain” by David Butler and Lorimer Moseley.

Ask your local library to order them for you.

**Internet resources**

What is chronic pain?