

The Duragesic Patch

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Duragesic (fentanyl) is one of the long acting opioid medications available as a transdermal patch in the armamentarium of medications suitable for chronic pain management. The following information contains guidelines for the proper clinical application of the Duragesic patch for the management of patients with chronic pain.

An individual with chronic pain is generally described as one who has a subjective complaint of pain that is constant and daily for at least 3 to 6 months. Duragesic (fentanyl) is an effective agent for treating chronic pain patients, but it should never be used as a first line agent in an opioid naïve patient (i.e. one who has never taken any of the opioid medications). Fentanyl is one of the most lipophilic opioid medications, which makes it highly absorbable and in an opioid naïve patient, can result in potentially severe side-effects, including respiratory depression and even death.

As fentanyl is a morphine derivative caution must be employed when considering the use of the Duragesic patch. The patch should only be prescribed to patients who have tried and failed treatment with other opioid medications. This list includes the short-acting drugs such as tramadol (Ultram/Ultracet), propoxyphene (Darvocet), codeine (Tylenol #3), hydrocodone (Vicodin/Lortab/Lorcet), hydromorphone, (Dilaudid), immediate release morphine (MSIR), meperidine (Demerol/Mepergan), fentanyl stick (Actiq) and oxycodone (Percocet/Tylox). There are also other long-acting narcotics, such as Methodone (dolphine) and various brands of sustained release (SR) morphine such as Kadian, Avinza and MS Contin.

Now as to effective dosing of the patch, I suggest starting fentanyl at the lowest dose available which is currently 12.5 micrograms (mcg) whereby a 12.5mcg patch is applied to the skin and left in place for up to 72 hours then reapplied thereafter every 3 days. Moving up the scale to the next dose would be 25mcg assuming pain relief is not sustained at the 12.5mcg level. I recommend that titration above the 25mcg level occur (once a month) in 25mcg increments until adequate pain relief has been obtained without severe side effects such as somnolence, nausea, constipation and skin rash. The dosing can be reduced to once every 48 hours as some patients notice a precipitous decrease in efficacy after two days. I counsel my patients to place the patch on any area of the body without a lot of hair, preferably the upper arms, upper back and in women the upper chest. Patients need to alternate sites each time the patch is reapplied. The patch should be left on at all times including while bathing. Should the patch lose adhesion before the

2 or 3 days are up, it should not be discarded but simply reattached by sealing it with surgical tape around the edges or by applying tegaderm dressing over the patch to keep it applied to the skin. Another important consideration is that the drug does not reach therapeutic concentrations in the blood for 8 to 12 hours after the patch is initially applied. Because of the cutaneous depot of the medication, pain relief as well as any adverse reactions will persist for several hours after the patch is removed.

The primary barriers for patients in using the patch effectively include:

- allergic reaction to fentanyl
- skin irritation from the adhesive
- inability to contend with certain side effects (nausea, dizziness, constipation, or daytime sleepiness)
- skin irritation from sun exposure
- inability to maintain adhesion (typical for patients with excessively oily skin)

It is important that medical care providers carefully counsel patients to precisely follow prescribing instructions including proper application to the skin, disposal requirements and most importantly to never cut or disassemble the patch in any manner or to orally ingest the liquid as this can cause death. As a matter of fact the media has recently reported a significant number of deaths associated with the abusive practice of oral ingestion of fentanyl. Patients should also be reminded to avoid long exposure to sunlight or rooms/areas with high temperature as this affects the absorption characteristics of fentanyl.

The Duragesic patch is a powerful tool in the arsenal of the physician challenged with providing pain relief and is especially useful for patients who have difficulty swallowing or with malabsorption. Provided your patient is not limited by the barriers and can safely use the medication as directed, the patch is an extremely effective medication in the long term management of patients with chronic pain.

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