

Fentanyl Patch

BRAND NAME: DURAGESIC PATCHES

available in
25 microgram,
50 microgram,
75 microgram and
100 microgram patches

USES OF THIS MEDICATION

The primary use of the fentanyl patch is to provide a continuous delivery of pain reliever to a patient with on-going pain. These patches are especially useful after a surgical procedure but are also helpful after injury or in the management of cancer pain particularly if giving medication orally is problematic. In the past, pain relievers have been given as shots or pills on an as-needed basis. Since it is difficult to determine when an animal is in pain, the basic guideline is to consider the pain that human patients report after similar surgeries or injuries. If a human would be expected to experience pain in a similar circumstance, then it can be assumed that an animal would feel pain as well.

Research into the human experience of pain and its relief has yielded some important information:

- Recovery from illness is faster if pain is alleviated
- It is more effective to prevent pain than to alleviate existing pain (i.e. using pain medications in anticipation of pain is more effective than waiting until the pain already exists)
- Continuous delivery of pain relief is more effective than periodic administration of pain relief

The “transdermal” delivery systems have been very popular for continuous delivery of estrogens, nicotine, and anti-nausea medication (scopolamine). It appears that they also provide an excellent means of pain relief delivery.

HOW THIS MEDICATION WORKS

Fentanyl is a narcotic, a member of the same group of drugs to which opium and morphine belong. The following is a simplification of how these drugs affect the body:

Most of us are familiar with at least some of the opiate effects: pain relief, drowsiness, euphoria, addictiveness, diarrhea control, respiratory depression, hallucinations etc. The opiate drugs bind to different types of opiate receptors throughout the nervous system. Different types of opiate receptors are responsible for creating different narcotic effects. The “mu” receptor is responsible for the narcotic effects of euphoria, addiction, and respiratory depression. There are also “kappa” and “sigma” receptors with other effects. The strength of different opiate drugs are generally compared to those of morphine, which is, of course, one of the oldest of the opiates.

Fentanyl, like morphine (the standard in pain relief), binds only the mu receptor but does so approximately 75 to 100 times stronger than morphine. When delivered via a patch, Fentanyl reaches its peak blood level in 3-6 hours in the cat but takes a full 12 hours in the dog. After removal, fentanyl blood levels drop to zero within 24 hours. Patches last at least 4 days in pets.

SIDE EFFECTS

The most serious potential side effect is respiratory depression (i.e., not breathing adequately). This is a rare problem but if unusual weakness or drowsiness is observed, the patch may be creating a stronger effect than expected. The patch may be removed if there is any concern. This effect could become a significant risk if the patch is exposed to heating (electric blankets, sitting near a heater vent, heated water bed etc.) The patch may be toxic if swallowed.

Occasionally, a pet reacts to the adhesive on the back of the patch. Such skin reactions should resolve with patch removal and application of a topical cortisone product.

The euphoria effect can lead to an excessive appetite though in some animals, nausea may result, leading to a reduced appetite.

Fentanyl is not felt to be a sedative in the cat but in the dog some sedation may be observed. A wobbly gait may be a sign of sedation.

There is some variability in the blood levels achieved by different individuals. Some individuals require additional medication for "breakthrough" pain.

INTERACTIONS WITH OTHER MEDICATIONS

Fentanyl should be used with caution in combination with medications that have sedating properties.

Narcotics, including fentanyl, should not be used in patients using Anipryl/L-Deprenyl for either the treatment of Cushing's disease or for senility/cognitive dysfunction.

CONCERNS AND CAUTIONS

Fentanyl is a "controlled" drug meaning that special government paperwork is required to order and stock it. Your veterinarian may require you to return any used patches for documentation of proper disposal.

**THE APPLICATION OF HEAT
TO A FENTANYL PATCH
CAN LEAD TO SUDDEN DELIVERY
OF A LARGE AMOUNT OF FENTANYL.**

**Human deaths have been reported in
patch-wearing patients sleeping on heated water beds.
If your pet has a fentanyl patch, be sure to avoid situations
where the patch could be excessively heated.**

Fentanyl patches may be toxic if swallowed by small children. Be conscious of any children curious about the patch or attempting to manipulate it.



Mar Vista Animal Medical Center

3850 Grand View Blvd., Los Angeles, CA 90066 • (310) 391-6741 • Fax: (310) 391-6744
Additional drug and general pet care information can be found on our world wide web site:
<http://www.marvistavet.com>