

NEW ZEALAND DATA SHEET

MYLAN FENTANYL PATCH



Fentanyl transdermal patch

*12.5 micrograms/hour, 25 micrograms/hour,
50 micrograms/hour, 75 micrograms/hour, 100 micrograms/hour*

Presentation

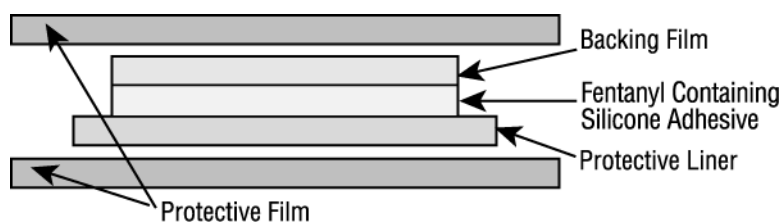
Mylan Fentanyl Patch is a transdermal system (patch), which provides continuous systemic delivery of fentanyl, a potent opioid analgesic, for the intended duration of application (72 hours).

Mylan Fentanyl Patch is a translucent rectangular patch with rounded corners comprising a protective liner and two functional layers. Proceeding from the outer surface toward the surface adhering to skin, these layers are:

1. a backing layer of polyolefin film; and
2. a fentanyl containing silicone adhesive layer. Before use, a protective liner that is attached to and covering the adhesive layer is removed and discarded.

Mylan Fentanyl Patch systems are packaged with additional pieces of protective film above and below the system within each pouch. These are also discarded at the time of use.

(Diagram Not to Scale)



Mylan Fentanyl Patch is available in five different strengths, the composition of which is identical per unit area. The 3.13, 6.25, 12.5, 18.75, 25 cm² systems are designed to deliver 12.5, 25, 50, 75 and 100 micrograms/hour fentanyl. The other components are pharmacologically inactive.

Uses

Actions

Fentanyl is an opioid analgesic, interacting predominantly with the mu-opioid receptor. Its primary therapeutic actions are analgesia and sedation. Minimum effective analgesic serum concentrations of fentanyl in opioid-naïve patients range from 0.3 to 1.5 nanograms/mL; side effects increase in frequency at serum levels above 2 nanograms/mL. The concentration at which opioid-related adverse reactions occur rises with increasing patient tolerance to the medicine. The rate at which tolerance develops varies widely among individuals.

Pharmacokinetics

Mylan Fentanyl Patch provides continuous systemic delivery of fentanyl during the 72-hour application period. The release of fentanyl from the patch is sufficiently controlled by the stratum corneum of the skin. After initial application, serum fentanyl concentrations increase gradually, levelling off at between 12 and 24 hours and remaining relatively constant for the remainder of the 72-hour application period. The serum fentanyl concentrations attained are proportional to the fentanyl patch size. After repeated 72-hour

applications, patients reach a steady state serum concentration that is maintained during subsequent applications of a patch of the same size.

After the patch is removed, serum fentanyl concentrations decline gradually with mean half-life ranging from 22-25 hours. Continued absorption of the fentanyl within the skin accounts for the slower disappearance of fentanyl from the serum than is seen after administration of fentanyl by IV infusion. Elderly, cachectic, or debilitated patients may have a reduced clearance of fentanyl and therefore, the terminal half life of fentanyl may be prolonged in this patient group. Fentanyl is metabolised primarily in the liver. Approximately 75% of fentanyl is excreted into the urine, mostly as metabolites, with less than 10% as unchanged fentanyl. About 9% of the dose is recovered in the faeces, primarily as metabolites. Mean values for unbound fractions of fentanyl in plasma are estimated to be between 13 and 21%.

Indications

Mylan Fentanyl Patch is indicated in the management of chronic cancer pain.

Mylan Fentanyl Patch is also indicated in the management of opioid-responsive chronic severe pain of non-malignant origin in opioid tolerant patients, after other conservative methods of analgesia have been tried.

It is indicated for use in accordance with NZMA guidelines on chronic pain management and where there is no psychological contraindication, drug seeking behaviour or history of drug misuse.

Dosage and Administration

The Mylan Fentanyl Patch doses should be individualised based on the status of the patient and should be assessed at regular intervals after application.

The Mylan Fentanyl Patch should be applied to non-irritated and non-irradiated skin of a flat surface on the torso or upper arms. Hair at the application site (a non-hairy area is preferable) should be clipped (not shaved) prior to application. If the site of Mylan Fentanyl Patch application requires cleansing prior to application of the system, this should be done with clean water. Soaps, oils, lotions, or any other agent that might irritate the skin or alter its characteristics should not be used. The skin should be completely dry before the patch is applied. Patches should be inspected prior to use. Patches that are cut, divided, or damaged in any way should not be used.

Mylan Fentanyl Patch should be applied immediately upon removal from the sealed package. The patch should be pressed firmly in place with the palm of the hand for approximately 30 seconds, making sure the contact is complete, especially around the edges. Caregivers should be advised to avoid contact with the adhesive when applying the system to the patient.

Each patch should be worn continuously for 72 hours. A new patch should be applied to a different skin site after removal of the previous patch. Several days should elapse before a new patch is applied to the same area of the skin.

Disposal of the patch

The content of the patches may be retrieved and abused. Fold used patches so that the adhesive side of the patches adheres to itself, and then they should be discarded. Unused systems should be returned to pharmacy. In medical institutions, the usual opioid disposal arrangement should be utilised.

Non-Adhesion of the Patch

If the Mylan Fentanyl Patch does not adhere properly, first aid tape may be applied around the edges of the patch. If the adhesion problem persists, the Mylan Fentanyl Patch may be overlaid with a transparent adhesive film dressing, eg. OpSite™ Flexigrid™, or OpSite™ Flexifix™. **Never fully cover a Mylan Fentanyl Patch with any other bandage or tape.**

Initial dose selection

The appropriate initiating dose of Mylan Fentanyl Patch should be based on the patient's current opioid use. It is recommended that Mylan Fentanyl Patch be used in patients who have demonstrated opioid tolerance. Other factors to be considered are the current general condition and medical status of the patient, including body size, age and extent of debilitation as well as degree of opioid tolerance.

Opioid-naïve patients

Clinical experience with fentanyl transdermal patches is limited in opioid-naïve patients. In the circumstances in which therapy is considered appropriate in opioid-naïve patients, it is recommended that these patients be first titrated with low doses of opioids to attain equianalgesic dose of not more than 25 micrograms/hour fentanyl before they are converted to Mylan Fentanyl Patch.

The dose may subsequently be titrated upwards or downwards, if required, in increments of either 12.5 or 25 micrograms/hour to achieve the lowest appropriate dose of fentanyl depending on response and supplementary analgesic requirements (see Tables 1 and 2).

Mylan Fentanyl Patch is not recommended in opioid-naïve patients with non-cancer pain (see **WARNINGS AND PRECAUTIONS**).

Opioid-tolerant patients

To convert opioid-tolerant patients from oral or parenteral opioids to Mylan Fentanyl Patch, refer to Equianalgesic potency conversion (Table 1), and recommended Mylan Fentanyl Patch dose based upon daily oral morphine dose (Table 2). The dosage may subsequently be titrated upwards or downwards, if required, in increments of either 12.5 or 25 micrograms/hour to achieve the lowest appropriate dose of fentanyl depending on response and supplementary analgesic requirements.

Equianalgesic potency conversion

To convert from oral or parenteral opioids to Mylan Fentanyl Patch, the following procedure should be followed:

Calculate the opioid doses administered in the previous 24-hours.

Convert this amount to the equianalgesic oral morphine dose using Table 1. All intramuscular and oral doses in this chart are considered equivalent to 10 mg of intramuscular morphine in analgesic effect.

Table 2 displays the range of 24-hour oral morphine doses that are recommended for conversion to each Mylan Fentanyl Patch dose. Use this table to derive the Mylan Fentanyl Patch dose from the calculated 24-hour morphine dose.

Table 1: Equianalgesic potency conversion

Drug Name	Equianalgesic Dose (mg)	
	IM*	Oral
Morphine	10	30 (assuming repeated dosing)** 60 (assuming single or intermittent dosing)
Methadone	10	20
Oxycodone	15	30
Pethidine	75	--
Codeine	130	200
Buprenorphine	0.4	0.8 (sublingual)

* Based on single-dose studies in which an IM dose of each agent listed was compared with morphine to establish the relative potency. Oral doses are those recommended when changing from a parenteral to an oral route.

** The oral/IM potency for morphine is based on clinical experience in patients with chronic pain.

Reference: Adapted from Foley KM. The treatment of cancer pain. NEJM 1985; 313(2):84-95.

Table 2: Recommended Mylan Fentanyl Patch dose based on daily oral morphine dose***

Oral 24-hour morphine (mg/day)	Mylan Fentanyl Patch Dose (micrograms/hour)
< 60	12.5*
60-134	25
135 - 224	50
225 - 314	75
315 - 404	100
405 - 494	125
495 - 584	150
585 - 674	175
675 - 764	200
765 - 854	225
855 - 944	250
945 - 1034	275
1035 - 1124	300

*** In fentanyl patch clinical trials, these ranges of daily oral morphine doses were used as a basis for conversion to fentanyl patches.

* Based on dose proportionality and not clinical trial data on dose conversion.

Both in opioid-naïve and opioid-tolerant patients, the initial evaluation of the maximum analgesic effect of Mylan Fentanyl Patch, should not be made before the patch has been worn for 24 hours. This is due to the gradual increase in serum fentanyl concentration in the 24 hours following initial application of the patch.

Previous analgesic therapy should therefore be gradually phased out after the initial dose application until analgesic efficacy with Mylan Fentanyl Patch is attained.

Dose titration and maintenance therapy

The patch should be replaced every 72 hours. The dose should be titrated individually until analgesic efficacy is attained. If analgesia is insufficient after the initial application the dose may be increased after 3 days. Thereafter, dose adjustment can take place every 3 days.

A 12.5 micrograms/hour fentanyl patch is available which equates to approximately 45 mg oral morphine/day. The 12.5 micrograms/hour strength is particularly useful for titration at lower dosages.

Dosage titration should normally be performed in 12.5 micrograms/hour or 25 micrograms/hour increments, although the supplementary analgesic requirements (oral morphine 45/90 mg/day is approximately

equivalent to Mylan Fentanyl Patch 12.5/25 micrograms/hour) and pain status of the patient should be taken into account. More than one Mylan Fentanyl Patch may be used for doses greater than 100 micrograms/hour. Patients may require periodic supplemental doses of a short-acting analgesic for "breakthrough" pain. Some patients may require additional or alternative methods of opioid administration when the fentanyl dose exceeds 300 micrograms/hour.

Discontinuation of therapy

As fentanyl levels decrease gradually after the patch is removed, replacement with other opioids should be gradual, starting at a low dose and increasing slowly. After system removal, serum fentanyl concentrations decline gradually with mean half-life ranging from 22-25 hours. In general, discontinuation of opioid analgesia should be gradual in order to prevent withdrawal symptoms.

Contraindications

Mylan Fentanyl Patch is contraindicated in patients with known hypersensitivity to fentanyl or to the adhesives present in the system.

Warnings and Precautions

Fentanyl patches should not be used in the management of acute or post-operative pain since there is no opportunity for dose titration during short term use and serious or life-threatening hypoventilation could result.

Patients who have experienced serious adverse events should be monitored for up to 24 hours after fentanyl patch removal since serum fentanyl concentrations decline gradually with mean half-life ranging from 22-25 hours.

Fentanyl patches should be kept out of reach of children before and after use.

Fentanyl patches should not be cut. A patch that has been divided, cut, or damaged in any way should not be used.

The contents of disposed patches may be retrieved and ingested by addicts. Deaths have occurred as a result of such abuse. Please ensure that used patches are concealed and disposed of carefully (see **PHARMACEUTICAL PRECAUTIONS-INSTRUCTIONS TO THE PATIENTS**).

The initial dose should be the lowest possible dose based on the patient's opioid history and the current medical status. Dosage must be titrated upward as required (see **DOSAGE AND ADMINISTRATION**).

Fentanyl patches are not recommended in opioid-naïve patients with non-cancer pain. This is due to a high incidence of adverse events in these patients (see **ADVERSE EFFECTS**).

Interchangeability

It is not possible to ensure the interchangeability of different brands of fentanyl transdermal patches in individual patients. Therefore, it should be emphasised that patients should not be changed from one make of fentanyl transdermal patches to another without specific counselling on the change from their healthcare professionals.

Opioid-naïve and opioid-tolerant states

Use of fentanyl patches in the opioid-naïve patients has been associated with very rare cases of significant respiratory depression and/or fatality when used as initial opioid therapy. The potential for serious or life-threatening hypoventilation exists even if the lowest dose of fentanyl patch is used in initiating therapy in opioid-naïve patients. It is recommended that fentanyl patches be used in patients who have demonstrated opioid tolerance (see Initial Dose Selection under **DOSAGE AND ADMINISTRATION**).

Respiratory depression

As with all potent opioids, some patients may experience significant respiratory depression with fentanyl patches. Patients must be observed for these effects. Respiratory depression may persist beyond the removal of the fentanyl patch. The incidence of respiratory depression increases as the fentanyl dose is

increased. See also **OVERDOSAGE** concerning respiratory depression. CNS active medicines may increase the risk of developing respiratory depression (see **INTERACTIONS**).

Chronic pulmonary disease

Fentanyl patches may have more severe adverse effects in patients with chronic obstructive, or other, pulmonary disease. In such patients, opioids may decrease respiratory drive and increase airways resistance.

Drug and alcohol dependence and potential for abuse

As with other opioids, tolerance and physical and psychological dependence may develop upon repeated or prolonged use of fentanyl patches. Iatrogenic addiction following opioid administration for the management of pain is rare.

Fentanyl can be abused in a manner similar to other opioid agonists. Abuse or intentional misuse of fentanyl patches may result in overdose and/or death. Patients at increased risk of opioid abuse may still be appropriately treated with modified-release opioid formulations; however, these patients will require monitoring for signs of misuse, abuse, or addiction.

Increased intracranial pressure

Fentanyl patches should be used with caution in patients who are particularly susceptible to the intracranial effects of CO₂ retention such as those with evidence of increased intracranial pressure, impaired consciousness or coma. Fentanyl patches should be used with caution in patients with brain tumours.

Cardiac disease

Fentanyl may produce bradycardia and should therefore be administered with caution to patients with bradyarrhythmias.

Hepatic disease

Because fentanyl is metabolised to inactive metabolites in the liver, hepatic disease might delay its elimination. In patients with hepatic cirrhosis, the pharmacokinetics of a single application of a fentanyl patch were not altered although serum concentrations tended to be higher in these patients. Patients with hepatic impairment should be observed carefully for signs of fentanyl toxicity and the dose of fentanyl patches reduced if necessary.

Renal disease

Less than 10% of fentanyl is excreted unchanged by the kidney and, unlike morphine, there are no known active metabolites eliminated by the kidney. Data obtained with intravenous fentanyl in patients with renal failure suggest that the volume of distribution of fentanyl may be changed by dialysis. This may affect serum concentrations. If patients with renal impairment receive fentanyl patches, they should be observed carefully for signs of fentanyl toxicity and the dose reduced if necessary.

Fever/external heat application

Based on a pharmacokinetic model, serum fentanyl concentrations could theoretically increase by approximately one third for patients with a body temperature of 40°C due to temperature-dependent increases in fentanyl release from the system and increased skin permeability. Therefore, patients wearing fentanyl patches who develop fever should be monitored for opioid side effects and the fentanyl dose should be adjusted if necessary. There is a potential for temperature-dependent increases in fentanyl released from the patch resulting in possible overdose and death.

All patients should be advised to avoid exposing the fentanyl patch application site to heat sources such as heating pads, electric blankets, heated water beds, heat or tanning lamps, intensive sunbathing, hot water bottles, prolonged hot baths, saunas and hot whirlpool spa baths.

Use in elderly patients

Data from intravenous studies with fentanyl suggest that in elderly patients there may be a reduced clearance and prolonged half-life. Elderly patients may therefore, be more sensitive to fentanyl than younger patients.

However, in studies of fentanyl patches, elderly patients had fentanyl pharmacokinetics, which did not differ significantly from young patients although serum concentrations tended to be higher. Elderly patients should be observed carefully for signs of fentanyl toxicity and the dose reduced if necessary.

Use in children

The safety and efficacy of fentanyl patches in children has not been established.

Accidental adhesion to another person

The patch must only be used by the person for whom it was prescribed. A few cases are known where a patch has accidentally adhered to another person sharing the same bed as the patient. Patients should be advised that in case of adhesion to the skin of another person, the patch must be taken off immediately and a doctor called (see **OVERDOSAGE**).

Pregnancy and lactation

Use in pregnancy

Category C. The safe use of fentanyl has not been established with respect to possible adverse effects upon foetal development. The potential risk for humans is unknown, although fentanyl as an IV anaesthetic has been found to cross the placenta in early stages of human pregnancies. Neonatal withdrawal syndrome has been reported in newborn infants with chronic maternal use of fentanyl patches during pregnancy.

Use of fentanyl patches during childbirth is not recommended because fentanyl passes through the placenta and may cause respiratory depression in the newborn child, and because it should not be used in the management of acute or postoperative pain (see **WARNINGS AND PRECAUTIONS**).

Use in lactation

Fentanyl is excreted into human milk and may cause sedation/respiratory depression in the newborn/infant. Therefore fentanyl patches are not recommended for use in breast-feeding women.

Effects on ability to drive and use machines

Fentanyl patches may impair mental and/or physical ability required for the performance of potentially hazardous tasks such as driving a car or operating machinery.

Adverse Effects

The most serious adverse reaction, as with all potent opioids, is hypoventilation. Other opioid-related adverse reactions include nausea, vomiting, constipation, hypotension, bradycardia, somnolence, headache, confusion, hallucinations, euphoria, pruritus, sweating and urinary retention.

Skin reactions such as rash, pustules, papules, erythema, oedema and itching have occasionally been reported. These reactions usually resolve within 24 hours of removal of the patch. However, patients with compromised immune function should be carefully monitored for skin reactions (see **PRECAUTIONS**).

Reactions such as nausea, vomiting, anorexia, diarrhoea, sweating, shivering, anxiety and depression are associated with opioid withdrawal syndrome in some patients after converting to fentanyl patches from their previous opioid, or if therapy is stopped suddenly. Slow tapering of the dose may lessen the severity of withdrawal symptoms. These effects are usually resolved by the administration of a short acting opioid on a PRN basis (see **DOSAGE AND ADMINISTRATION**).

Clinical Trials Data

A multicenter, double-blind, randomized, placebo-controlled clinical study (FEN-EMA-1) of fentanyl patches examined patients (>40 years of age) with severe pain induced by osteoarthritis of the hip or knee and who were in need of and waiting for joint replacement. Patients were treated for 6 weeks with fentanyl patches by titrating to adequate pain control starting from 25 micrograms/hour to a maximum dose of 100 micrograms/hour in 25 micrograms/hour increments. This treatment was preceded by a 1-week washout period and followed by a tapering-off period of no more than 12 days. The adverse events, regardless of causality, reported by 1% or more of the patients treated with fentanyl patches during the double-blind period and reported at a frequency greater than with placebo are presented in Table 3.

Table 3. Adverse Events, Regardless of Causality, Reported by ≥1% of Patients and Reported More Frequently with Fentanyl Patches than with Placebo During Double-Blind Treatment

Body System/Organ Class Adverse Event Term	Fentanyl Patches^(a) (%) (n=216)	Placebo (%) (n=200)
Metabolism and nutritional disorders		
Anorexia	1.4	0.5
Psychiatric Disorders		
Somnolence	22.2	4.0
Insomnia	10.2	7.0
Anxiety	3.2	0.5
Depression	1.4	0
Nervous system disorders		
Dizziness	12.5	5.5
Involuntary muscle contractions	6.5	3.0
Hypoaesthesia	1.4	0.5
Eye disorders		
Conjunctivitis	1.9	1.0
Cardiac disorders		
Palpitations	3.7	1.0
Respiratory, thoracic, and mediastinal disorders		
Yawning	5.1	2.0
Rhinitis	2.3	1.0
Gastrointestinal disorders		
Nausea	44.9	19.0
Vomiting	29.6	2.5
Constipation	10.2	1.5

Table 3. Adverse Events, Regardless of Causality, Reported by ≥1% of Patients and Reported More Frequently with Fentanyl Patches than with Placebo During Double-Blind Treatment

Body System/Organ Class Adverse Event Term	Fentanyl Patches^(a) (%) (n=216)	Placebo (%) (n=200)
Anorexia	4.6	0
Abdominal pain	3.3	2.0
Dyspepsia	2.8	2.5
Dry mouth	2.8	1.0
Skin and subcutaneous tissue disorders		
Pruritus	8.3	3.0
Skin disorder	1.4	0.5
Renal and urinary disorders		
Urinary tract infection	1.4	1.0
General disorders and administration site conditions		
Feeling of body temperature change	7.4	2.0
Hyperhidrosis	7.4	1.0
Fatigue	6.5	3.0
Malaise	3.7	1.5
Influenza like illness	2.3	0.5
Peripheral oedema	2.3	0.5
Asthenia	2.3	0
Drug withdrawal syndrome	1.4	0

^(a): doses of 25, 50, 75 or 100 micrograms/hr

Postmarketing Data

Adverse drug reactions from spontaneous reports during the worldwide postmarketing experience involving all indications with fentanyl patches are presented below. The adverse drug reactions are presented by system/organ class, and are ranked by frequency, using the following convention:

Very common ≥ 1/10;

Common ≥1/100 to < 1/10;

Uncommon $\geq 1/1000$ to $< 1/100$;
Rare $\geq 1/10,000$ to $< 1/1000$;
Very Rare $< 1/10,000$, including isolated reports.

The frequencies provided below reflect reporting rates for adverse drug reactions from spontaneous reports and do not represent more precise estimates that might be obtained in clinical trials or epidemiological studies.

Immune System Disorders

Very rare: Anaphylactic shock, anaphylactic reaction, anaphylactoid reaction

Metabolism and Nutrition Disorders

Very rare: Anorexia

Psychiatric Disorders

Very rare: Depression, confusional state, hallucination, anxiety, euphoric mood, agitation, insomnia

Nervous System Disorders

Very rare: Convulsions (including clonic convulsions and grand mal convulsion), amnesia, somnolence, dizziness, headache, tremor, paraesthesia

Cardiac Disorders

Very rare: Tachycardia, bradycardia

Renal and Urinary Disorders

Very rare: Urinary retention

Vascular Disorders

Very rare: Hypotension, hypertension

Respiratory, Thoracic, and Mediastinal Disorders

Very rare: Respiratory depression (including respiratory distress, apnoea, and bradypnoea; hypoventilation, dyspnoea

Deaths, mainly due to respiratory depression, have been reported with the use of fentanyl patches in opioid-naïve patients. This information is listed to serve as an alert for the physician.

Gastrointestinal Disorders

Very rare: Nausea, vomiting, constipation, diarrhoea, dyspepsia, dry mouth, ileus

Skin and Subcutaneous Tissue Disorders

Very rare: Rash, erythema, pruritus, sweating increased

Reproductive System and Breast Disorders

Very rare: sexual dysfunction

General Disorders and Administration Site Conditions

Very rare: Drug withdrawal syndrome, asthenia, application site reaction, feeling of body temperature change

As with other opioid analgesics, tolerance, physical dependence, and psychological dependence can develop on repeated use of fentanyl patches (see **WARNINGS AND PRECAUTIONS**).

Opioid withdrawal symptoms (such as nausea, vomiting, diarrhoea, anxiety and shivering) are possible in some patients after conversion from their previous opioid analgesic to fentanyl patches or if therapy is stopped suddenly. Slow tapering of the dose may lessen the severity of withdrawal symptoms. There have

been rare reports of newborn infants experiencing neonatal withdrawal syndrome when mothers chronically used fentanyl patches during pregnancy.

Interactions

The concomitant use of other central nervous system depressants, including opioids, sedatives, hypnotics, general anaesthetics, phenothiazines, tranquillisers, skeletal muscle relaxants, sedating antihistamines and alcoholic beverages, may produce additive depressant effects; hypoventilation, hypotension and profound sedation or coma may occur. Therefore, the use of any of these medicines concomitantly with fentanyl patches requires special patient care and observation.

Monoamine Oxidase Inhibitors

Fentanyl patches are not recommended for use in patients who require the concomitant administration of an MAOI. Severe and unpredictable interactions with MAOIs, involving the potentiation of opiate effects or the potentiation of serotonergic effects, have been reported. Therefore, fentanyl patches should not be used within 14 days after discontinuation of treatment with MAOIs.

CYP3A4 Inhibitors

Fentanyl is metabolised mainly via human CYP3A4 enzyme. The concomitant use of fentanyl patches with CYP3A4 inhibitors (e.g. ritonavir, ketoconazole, itraconazole, troleandomycin, clarithromycin, nelfinavir, nefazodone, verapamil, diltiazem and amiodarone) may result in an increase in fentanyl plasma concentrations, which could increase or prolong both the therapeutic and adverse effects, and may cause serious respiratory depression. In this situation, special patient care and observation are appropriate. Therefore, the concomitant use of transdermal fentanyl and CYP3A4 inhibitors is not recommended unless the patients are closely monitored, particularly for signs of respiratory depression, and dosage adjustment should be made if warranted.

Overdosage

Symptoms

The manifestations of fentanyl overdosage are an extension of its pharmacological actions, the most serious effect being respiratory depression.

Treatment

For management of respiratory depression, immediate countermeasures include removing the fentanyl patch and physically or verbally stimulating the patient. These actions can be followed by administration of a specific opioid antagonist such as naloxone. Respiratory depression following an overdose may outlast the duration of action of the opioid antagonist like naloxone owing to its relatively short half-life of 30 to 81 minutes. Therefore, the interval between IV antagonist doses should be carefully chosen because of the possibility of re-narcotisation after the patch is removed. Repeated administration or a continuous infusion of naloxone may be necessary. Reversal of the narcotic effect may result in acute onset of pain and release of catecholamines.

Because of the observed variability in the clearance of fentanyl and the occasional appearance of multiple peaks, careful observation of the patient should continue for at least 24 hours after removal of the fentanyl patch.

If the clinical situation warrants, a patent airway should be established and maintained, possibly with an oropharyngeal airway or endotracheal tube. Oxygen should be administered and respiration assisted or controlled, as appropriate. Adequate body temperature and fluid intake should be maintained. If severe or persistent hypotension occurs, hypovolaemia should be considered and the condition should be managed with appropriate parenteral fluid therapy.

Pharmaceutical Precautions

Instructions to the patient

Instruction for use/handling

The Mylan Fentanyl Patch should be applied immediately upon removal from the sealed package. The patch should be first removed from the protective liner, then after locating the pre-cut notch (indicated by scissors on the patch label) along the edge of the seal, the pouch should be folded at the notch, and then carefully torn. The pouch should then be further opened along both sides, folding it like a book. The release liner is slit. After folding the patch in the middle, each half of the liner should be separately removed. Patients should avoid touching the adhesive side of the patch. The patch must be applied to the skin by applying light pressure with the palm of the hand for about 30 seconds, making certain the edges are adhering properly. Patients should wash hands afterwards with clean water.

Disposal of the Patches

The content of fentanyl patches may be retrieved and abused. Used patches should be folded so that the adhesive side of the patch adheres to itself, and then wrapped and disposed of carefully. Unused systems should be returned to the pharmacy or hospital.

Non-Adhesion of the Patches

If the Mylan Fentanyl Patch does not adhere properly, first aid tape may be applied around the edges of the patch. If the adhesion problem persists, the Mylan Fentanyl Patch may be overlaid with a transparent adhesive film dressing, eg. OpSite™ Flexigrid™, or OpSite™ Flexifix™. **Never fully cover a Mylan Fentanyl Patch with any other bandage or tape.**

Shelf Life

2 years.

Special Precautions for Storage

Store unused patch in sealed pouch. Store below 25°C.

Medicine Classification

CONTROLLED DRUG (B3)

Package Quantities

Mylan Fentanyl Patch is available in five different strengths.

	Dose micrograms/hour	Patch Size (cm²)	Fentanyl Content mg
Mylan Fentanyl Patch	12.5	3.13	1.28
Mylan Fentanyl Patch	25	6.25	2.55
Mylan Fentanyl Patch	50	12.5	5.10
Mylan Fentanyl Patch	75	18.75	7.65
Mylan Fentanyl Patch	100	25	10.20

Each patch is packed in a heat-sealed pouch and is supplied in cartons containing 5 pouches.

Further Information

Nil.

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Date of Preparation

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