

MENSTRUAL CRAMPS: TRANSDERMAL PATCHES**Dr. SD Abdul Jabbar Basha¹, A. Samyuktha*², Ch. Mounika² and J. Sharoni²**¹Associate Professor, Dept. of Pharmacotherapeutics, ²Student of Pharm D 5th Year, Pratishta

Institute of Pharmaceutical Sciences, Suryapet 508213.

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Corresponding Author*A. Samyuktha**Student of Pharm D 5th Year,
Pratishta Institute of
Pharmaceutical Sciences,
Suryapet 508213.**ABSTRACT**

Menstrual cramps are throbbing or cramping pains in lower abdomen. Many women have menstrual cramps just before and during their menstrual period. Women look for some quick and effective pain relief solutions. So, a new medicated pain relief patches has been developed as treatment for menstrual cramps. These Patches have some ADVANTAGES and also DISADVANTAGES. The length of wear time and the amount of drug delivered is different from patch to patch. These Patches are made from natural ingredients with the extracts of camphor, menthol, eucalyptus oil etc. and other drugs. These pain relief patches will calm your muscles in on time. These Patches are satisfactory in 90% of the women. The main objective of pain relief patches is to deliver drugs into systemic circulation through skin.

KEYWORDS: transdermal patches, menstrual cramps.**INTRODUCTION**

Menstrual cramps affects upto 90% of adolescence and young women. This condition is frequently left untreated eventhough there is availability of many effective pharmacological treatments. The pathogenesis behind these condition is unknown but they be due to increased uterine contractions, uterine vasoconstriction etc., Generally, women try the OTC medication like NSAIDS (Advil, Ibuprofen...) those having a direct analgesic effect and they also decrease volume of menstrual flow. NSAIDS cause several side effects like gastric upset, stomach ulcer, nausea and vomiting etc., To overcome this problems a new medicated patches worn on the abdomen has been developed as a treatment for menstrual cramps. The patch delivers the medication over a 24hr period stopping contraction of the uterus which are often the cause of the cramps.

MODE OF ACTION

Release from the base material of the patches

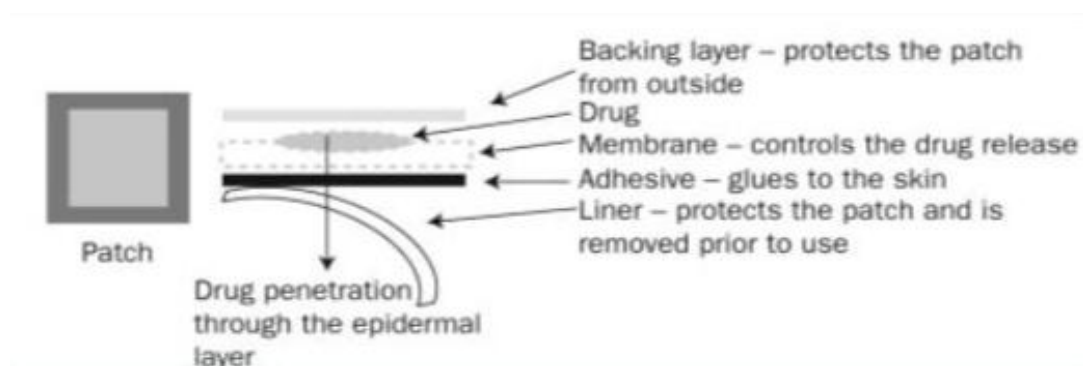
Diffusion to the stratum corneum

Diffusion to the epidermis

Diffusion to the dermis

Migration to capillary vessels

Migration to the affected area



The drug's ability to penetrate the skin's epidermis, dermis, and subcutaneous fat layers will lead to transdermal drug delivery, giving rise to systemic action.

A skin patch acts as a carrier for the drug, holding it until the purpose of application. Transdermal patches deliver drugs topically; they are absorbed by the skin and enter the bloodstream. They provide a consistent delivery of a small amount of drug into the bloodstream over a long period of time. Drugs with lipophilic character can cross the stratum corneum, but drugs with hydrophilic character will not reach systemic circulation. This patch can work for up to 12 hours but does not need reapplication for every 3-4 hours like in the case of pain relief ointments.

PHARMACOLOGICAL MANAGEMENT

The Extracts of Natural Ingredients Like Camphor, Menthol, Eucalyptus Oil, Methyl Salicylates, Boswellia, Some Herbal Products Are.

- Feminine herbal pain relief patch -12hrs/day

- Sirona herbal pain relief patch-12hrs/day
- FLOH Crampfree period pain relief patch
- Menthopas-topical pain relief patch

Drug patches

Piroxicam Transdermal patch-40mg

Buprenorphine transdermal patch-5,7.5,10,15,20mcg/h

Advantages

- Avoidance of 1st pass metabolism of a drug
- No interference with GI fluids
- Easy elimination of drug during toxicity
- Self administration is possible
- Topical patches are painless

Disadvantages

- Causes rashes, local irritation, erythema
- Patch may fall off unnoticed
- May not adhere well to all types of skin

CONCLUSION

Hence, menstrual cramp transdermal patches are painless, convenient and potentially effective, minimal complications, easy to use avoidance of first pass metabolism. These patches are used to avoid the side effects associated with the therapy and can safely deliver the drug for treating menstrual cramps with better patient compliance.

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