

Local anaesthesia with eutectic cream of lidocaine and prilocaine for treatment of cicatrized phimosis in outpatients

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Abstract. – The authors report their experience in ambulatory treatment of cicatrized phimosis in outpatients, by using local anaesthesia with eutectic cream of lidocaine and prilocaine. This preliminary study shows that preparation seems to be effective and well tolerated. To the aim of getting a good analgesic result the most important aspects are a careful application of the cream all over the concerned area and an occlusive bandage for 60-90 minutes at least.

Key Words:

Phimosis, Local anaesthesia.

Nowadays an eutectic mixture of local anaesthetics may be used to get a superficial effective anaesthesia by topical application.

This drug is in the form of a cream and contains lidocaine and prilocaine in a 5% solution.

It is an oily composition emulsified in water which permits to get an high concentration of anaesthetics and moreover an effective penetration through the integral cutis.

The authors report their experience in treatment of cicatrized phimosis in outpatients by using this anaesthetic practice.

Introduction

The appearance of anaesthetic drugs able to guarantee an effective local anaesthesia and alleviate pain due to operation by local infiltration, with a low incidence of collateral effects, has enlarged the possibility to make a surgical operation in outpatients.

Thus derives a reduction of costs and a larger patients' compliance.

Local anaesthesia is usually achieved by infiltration of anaesthetics which act on local nerve endings or by infiltration of the nerve trunk of concerned area.

However this methodical removes pain during surgery but not during the inserting of the needle and diffusion of anaesthetics in tissues.

Therefore is necessary to research drugs able to assure analgesia, acting by direct contact with cutis and mucous membranes.

No drugs able to surmount cutaneous barrier and assure effective anaesthesia were available till now.

Material and Methods

In last months, in our ambulatory surgical experience, 12 patients underwent circumcision. Ten of them were from 9 to 14 years old and 2 were over 50 years old.

Each patient had a tightly-woven cicatrized phimosis and everybody underwent local anaesthesia by means of eutectic cream of lidocaine and prilocaine.

In order to get an effective anaesthesia, a precise preparation of the concerned area and a careful application of the cream all over the region were necessary.

We filled a 2.5 ml syringe with the cream and injected a good quantity of the cream through the small preputial cleft. Moreover we also applied some cream on penis cutis.

Altogether we used 5 g of cream.

Penis was wrapped up with an adhesive transparent film, to make contact between cream and the concerned area. Then penis was wrapped up with a gauze and fixed to ab-

dominal wall until operation. Patients had a rest for about 1 hour and then underwent circumcision.

Results

In 10 patients surgical procedures didn't cause any pain; in one patient local infiltration of carbocaine at 1% was necessary. The other patient had a tolerable pain which didn't require any further infiltration.

Neither collateral effects nor cutaneous reactions were observed.

In order to get an effective analgesia, a careful application of the cream and the occlusive bandage are very important.

The occlusive bandage permits contact between cream and the area to be anaesthetized and reduces the loss of the watery component of the preparation at the same time.

As much important was the time elapsed between application of the cream over the cutis and the beginning of surgery (60-90 minutes at least).

That was perhaps the reason why the cream wasn't effective in 2 patients.

Discussion

Until a short time ago, we effected treatment of cicatricial phimosis in outpatients by local infiltration of anaesthetic substances.

However anaesthesia and surgical procedures were a traumatic experience in almost all patients and mostly among younger.

The most traumatic events were represented by the sight of the syringe and the inserting of the needle. These were reasons of anxiety in young patients during surgical operation. Moreover tissues imbibition by anaesthetic substances caused pain in patients and uneasiness in surgeons.

The use of the anaesthetic cream allows to obtain a relief of pain and a better patients' compliance during the operation.

The surgical procedures seem even easier because of the lack of imbibition of tissues.

Moreover the low systemic absorption of the drug is a safety factor for early patients' discharge.

Since the beginning of our experience we observed that local anaesthesia with eutectic mixture of lidocaine and prilocaine seems to be effective and well tolerated.

To the aim of getting a good analgesic result, the cream should be applied in a right quantity both in preputium and on penis skin. It also needs an occlusive bandage to permit a fair contact between drug and the area to be anaesthetized.

The time during which the cream is in contact with skin has a particular importance.

In our experience we have noted that 60-90 minutes are necessary at least.

In conclusion we may confirm that topical application of anaesthetic cream for ambulatory treatment of cicatricial phimosis represents a methodical easy to apply and permits a safer analgesic level during all time necessary for circumcision.

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