For the use of a Registered Medical Practitioner or a Hospital or a Laboratory only

℞ Terlipressin Injection

1mg/10ml

AMERICAN
TERLISIN
Injection

Sterile Solution For IV Use Only

COMPOSITION:
Each ml contains:
Terlipressin (as acetate).....0.10mg
Water for Injection IP.....q.s.

DESCRIPTION:
Terlipressin is a synthetic analogue of Vasopressin. It is N-α-triglycyl-8-lysine-vasopressin, a naturally occurring pituitary hormone. The difference between natural and synthetic vasopressin is the substitution of arginine in 8th position by lysine as well as connection of three glycine residuals to cysteine amino-acid terminal.

CLINICAL PHARMACOLOGY:
Terlipressin is inactive in relation to smooth muscle but it serves as a chemical depot for active pharmacological substances formed by enzymatic cleavage process. Compared with lysine-vasopressin, the effect comes more slowly, however much longer, lysine-vasopressin is subject to usual biodegradation in liver, kidneys and other tissues. The intravenous pharmacological profile can be described using a two-compartment model. The excretion half-life is about 40 minutes, metabolic clearance about 9 m/kg min and distribution volume about 0.5 l/kg. Estimated lysine-vasopressin concentration can be found in plasma 30 minutes after administration of Terlipressin with peak values after 60-120 minutes. The pharmacological effect of Terlipressin consists in superposition of effects of individual substances formed in course of enzymatic cleavage process. Terlipressin has significant vasoconstrictive and anti-haemorrhagic effect.. The most significant change is reduced blood flow in splanchnic area with following reduction of hepatic blood flow and portal blood pressure. Pharmacodynamic studies have shown that like other similar peptides, Terlipressin causes intrarteriolar intravenous and intravenular constrictions primarily in splanchnic area as well as constriction of oesophageal unstripped muscles and increase in tonus and intestinal peristaltic activity. In addition to its vasopressor effects, Terlipressin stimulates myometrial activity, even in nonpregnant uterus. The results of animal and human studies support the hypothesis of most intense Terlipressin activity in splanchnic area and skin. The anti-shock effect of Terlipressin has been confirmed for haemorrhagic but also for endotoxic and histaminic shocks. There are no clinical manifestations of the antidiuretic effect of Terlipressin .

INDICATIONS:
1. Bleeding as a result of surgery particularly of the abdominal and pelvic area.
2. Bleeding in gastrointestinal and urogenital systems such as oesophagus oesophageal varices, gastric and duodenal ulcerations, functional and similar types of metrorrhagia, birth, abortion etc.
3. Local application in gynecological operations, such as cervix porta uteri.

DOSAGE AND ADMINISTRATION:
Bleeding from the urogenital tract: Due to different activity of plasmatic and tissue endopeptidases. The dosage will range 0.2-1.0 mg (200-1000μg) every 4-6 hours.
Bleeding form oesophagal varices: 1.0mg (1000μg) every 4.6 hours for a duration of 3-5 days. For prevention of bleeding recurrence, continued medication shall be recommended. unless the bleeding has been controlled within 24-48 hours. The dose shall be administered IV (as a rule bolus) injection or short term infusion.
Other types of gastrointestinal haemorrhagia:1.0 mg(1000μg) every 4-6 hours. It can be used as a first aid medication in cases of clinically suspected bleeding in the upper part of gastrointestinal system.
Bleeding form the splanchnic region in children: The usual dose ranges form 8 to 20μg/kg of body weight given at intervals of 4-8 hours. The application should be continued throughout the period of bleeding, the general recommendation is to go ahead as in cases of bleeding in adults. For sclerotized oesophageal varices a single dose of 20 μg/kg of body weight to be given in bolus form.
Juvenile Metrorrhagia: For juvenile metrorrhagea, doses of 5-20 /μg/kg of body weight are recommended. The administration shall be intravenous, in exceptional cases intramuscular. Intramuscular route of administration shall be avoided particularly for higher doses.
Local application in gynaecological operations: Add saline to 0.4 mg (400 μg) dose to obtain 10ml and apply intracerically or paracervically. The effects of such preparation can be seen after approx. 5-10 minutes. If necessary, increase or repeat the dose.

CONTRAINDICATIONS:
It is contraindicated for the first three-month period of pregnancy, unless the indication is non-vital, pregnancy toxicosis, epilepsy. The benefits against risk in the following months of pregnancy always should be considered before administration. Special care and precautions should be taken when administering to elderly patients ischemia, serious hypertension, cardiac arrhythmia or asthma bronchiale.

Pregnancy and lactation:
Terlipressin causes rise In myometrial activity and decrease in uteral blood-flow. Reproduction studies in rabbits and rats with higher doses showed increased abortion rate or embryo deaths. In infants lower birth weight as well as increased anomaly rate has been found. Terlipressin distribution in breast milk is not available; however significant absorption of unchanged peptides in gastrointestinal system of child seems not to be probable.

Adverse effects:
The most frequent effects in course of administration are: paleness, hypertension, abdominal pain, accelerated defacecation or abdominal colics nausea, diarrhoea and headache, in less frequent cases bradycardia. Serious adverse effects are rare. Individual cases of heart attack failure, dyspnoea and local necrosis in the site of injection were also reported.

Interaction with other drugs:
Both oxytocin and methylergometrine increase the vasoconstrictive and uterotonic effects. Terlipressin enhances the hypotensive effect of non-selective blockers in the portal vein. Parallel medications with substances lowering heart rate can result in serious bradycardia.

Cautions:
For administration of Terlipressin in doses higher than 0.8 mg = 800 μg or more to patients with hypertension, heart insufficiency and senior patients it is recommended to tightly monitor the blood pressure, heart rate and liquid balance. Terlipressin is not meant as a replacement of blood substitution in patients with blood volume deficit. For individual cases of local necrosis, reported after administration of Terlipressin, an intramuscular administration of 0.5 mg (500 μg) doses and more needs to be avoided. Intravenous route of administration is preferred.

Overdosage:
Dosages if above 2 mg/4hours (2000 μg/4 hours) increases the risk of serious adverse effects on system circulation. Therefore, maximum prescribed dosage regimen should not be exceeded. In case of hypertension resulting from Terlipressin administration, clonidine or other α. Sympatholyticum shall be applied. In the case of bradycardia, atropine should be administered.

Storage : Store between 2° to 8°C.Do not freeze.Protected from light.
Improper storage may deteriorate the product.

Medicine : Keep out of reach of children.

PRESENTATION :
Each pack of **Terlipressin** 1 mg/10ml Injection contains Terlipressin (as acetate) 1 mg in 10 ml ampoule

Manufactured by:
AMERICAN REMEDIES©
Care & Cure with Research
American Remedies Healthcare Pvt. Ltd.
(An ISO 9001-2015 Certified Company)
ICO: American Remedies LLC, DE, USA
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WHO GMP CERTIFIED

190 mm