

# 1. Name of the medicinal product

Emcap Caplet

## 2. Qualitative and quantitative composition

Each tablet contains Paracetamol 500 mg.

For a full list of excipients, see section 6.1.

## 3. Pharmaceutical form

Tablet

White, uncoated tablet with Emzor inscription on one side and scored on the other side.

## 4. Clinical particulars

### 4.1 Therapeutic indications

Paracetamol is a mild analgesic and antipyretic, and is recommended for the treatment of most painful and febrile conditions, for example, headache including migraine and tension headaches, toothache, neuralgia, backache, rheumatic and muscle pains, dysmenorrhoea, sore throat, and for relieving the fever, aches and pains of colds and flu. Also recommended for the symptomatic relief of pain due to non-serious arthritis.

### 4.2 Posology and method of administration

Oral administration only.

#### ***Adults, the elderly and children over 16 years age:***

One to two tablets up to four times daily as required, up to a maximum of 8 tablets in 24 hours.

**Children 10 – 15 years:** 1 tablet every 4 hours as required, to a maximum of 4 tablets in 24 hours.

#### **Not recommended for children under 10 years of age.**

The dose should not be repeated more frequently than every 4 hours and not more than 4 doses should be taken in any 24 hour period.”

### 4.3 Contraindications

Hypersensitivity to paracetamol or any of the other constituents.

### 4.4 Special warnings and precautions for use

Care is advised in the administration of paracetamol to patients with severe renal or hepatic impairment. The hazard of overdosage is greater in those with non-cirrhotic alcoholic liver disease.

#### **Do not exceed the recommended dose.**

If symptoms persist for more than 3 days or get worse consult your doctor.

Do not take with other paracetamol-containing products.

Patients should be advised to consult a doctor if they suffer from non-serious arthritis and need to take painkillers every day.

Keep out of the sight and reach of children.

Immediate medical advice should be sought in the event of an overdose, even if you feel well, because of the risk of delayed, serious liver damage.

### 4.5 Interaction with other medicinal products and other forms of interaction

Colestyramine: The speed of absorption of paracetamol is reduced by colestyramine. Therefore, the colestyramine should not be taken within one hour if maximal analgesia is required.

Metoclopramide and domperidone: The speed of absorption of paracetamol may be increased by metoclopramide and domperidone. However, concurrent use need not be avoided.

Warfarin: The anticoagulant effect of warfarin and other coumarins may be enhanced by prolonged regular daily use of paracetamol with increased risk of bleeding; occasional doses have no significant effect.

Chloramphenicol: increased plasma concentration of chloramphenicol.

#### **4.6 Pregnancy and lactation**

A large amount of data on pregnant women indicate neither malformative, nor feto/neonatal toxicity.

Epidemiological studies on neurodevelopment in children exposed to paracetamol in utero show inconclusive results. If clinically needed, paracetamol can be used during pregnancy however it should be used at the lowest effective dose for the shortest possible time and at the lowest possible frequency.

Paracetamol is excreted in breast milk but not in a clinically significant amount. Available published data do not contraindicate breast-feeding.

#### **4.7 Effects on ability to drive and use machines**

None known.

#### **4.8 Undesirable effects**

Adverse effects of paracetamol are rare but hypersensitivity including skin rash may occur. There have been very rare reports of blood dyscrasias including thrombocytopenia, methaemoglobinaemia and agranulocytosis but these were not necessarily causally related to Paracetamol. Very rare cases of serious skin reactions have been reported.

#### **4.9 Overdose**

Liver damage is possible in adults who have taken 10g or more of paracetamol. Ingestion of 5g or more of paracetamol may lead to liver damage if the patient has risk factors (see below).

Risk Factors

If the patient

a) Is on long term treatment with carbamazepine, phenobarbitone, phenytoin, primidone, rifampicin, St John's Wort or other drugs that induce liver enzymes.

Or

b) Regularly consumes ethanol in excess of recommended amounts.

Or

c) Is likely to be glutathione deplete e.g. eating disorders, cystic fibrosis, HIV infection, starvation, cachexia.

Symptoms

Symptoms of paracetamol overdosage in the first 24 hours are pallor, nausea, vomiting, anorexia and abdominal pain. Liver damage may become apparent 12 to 48 hours after ingestion. Abnormalities of glucose metabolism and metabolic acidosis may occur. In severe poisoning, hepatic failure may progress to encephalopathy, haemorrhage, hypoglycaemia, cerebral oedema, and death. Acute renal failure with acute tubular necrosis, strongly suggested by loin pain, haematuria and proteinuria, may develop even in the absence of severe liver damage. Cardiac arrhythmias and pancreatitis have been reported.

Management

Immediate treatment is essential in the management of paracetamol overdose. Despite a lack of significant early symptoms, patient, should be referred to hospital urgently for immediate medical attention. Symptoms may be limited to nausea or vomiting and may not reflect the severity of overdose or the risk of organ damage. Management should be in accordance with established treatment guidelines, see BNF overdose section.

Treatment with activated charcoal should be considered if the overdose has been taken within 1 hour. Plasma paracetamol concentration should be measured at 4 hours or later after ingestion (earlier concentrations are unreliable).

Treatment with N-acetylcysteine may be used up to 24 hours after ingestion of paracetamol. However, the maximum protective effect is obtained up to 8 hours post ingestion. The effectiveness of the antidote declines sharply after this time.

If required the patient should be given intravenous N-acetylcysteine, in line with the established dosage schedule. If vomiting is not a problem, oral methionine may be suitable alternative for remote areas, outside hospital.

Management of patients who present with serious hepatic dysfunction beyond 24 hours from ingestion should be discussed with the NPIS or a liver unit.

## 5. Pharmacological properties

### 5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Anilides

ATC code: N02BE01

Mechanisms of action/Effect

Analgesic- the mechanism of analgesic action has not been fully determined. Paracetamol may act predominantly by inhibiting prostaglandin synthesis in the central nervous system and to a lesser extent, through a peripheral action by blocking pain-impulse generation.

The peripheral action may also be due to inhibition of prostaglandin synthesis or to the synthesis or actions of other substances that sensitise pain receptors to mechanical or chemical stimulation.

Antipyretic- paracetamol probably produces antipyresis by acting centrally on the hypothalamic heat-regulation centre to produce peripheral vasodilation resulting in increased blood flow through the skin, sweating and heat loss. The central action probably involves inhibition of prostaglandin synthesis in the hypothalamus.

### 5.2 Pharmacokinetic properties

#### Absorption and Fate

Paracetamol is rapidly absorbed from the gastrointestinal tract. The concentration in plasma reaches a peak in 30 to 2 hours after ingestion.

It is metabolised in the liver and excreted in the urine mainly as the glucuronide and sulphate conjugates. Less than 5% is excreted as unchanged paracetamol. The elimination half-life varies from about 1 to 4 hours. Plasma protein binding is negligible at usual therapeutic concentrations but increases with increasing concentrations.

A minor hydroxylated metabolite which is usually produced in very small amounts by mixed-function oxidases in the liver and which usually detoxified by conjugation with liver glutathione may accumulate following paracetamol overdosage and cause liver damage.

### 5.3 Preclinical safety data

No relevant information additional to that already contained elsewhere in the SPC.

Conventional studies using the currently accepted standards for the evaluation of toxicity to reproduction and development are not available.

## 6. Pharmaceutical particulars

### 6.1 List of excipients

maize starch

gelatin

colloidal anhydrous silica

purified talc

sodium starch glycollate (Type A)

magnesium stearate

### 6.2 Incompatibilities

The risk of paracetamol toxicity may be increased in patients receiving other potentially hepatotoxic drugs or drugs that induce liver microsomal enzymes.

### 6.3 Shelf life

36 months

### 6.4 Special precautions for storage

Do not store above 25°C. Store in the original container.

### 6.5 Nature and contents of container

Paracetamol Tablets are packaged in to blister packs containing 10 tablets.

The blister packs are constructed of clear,transparent PVC (0.25mm ) backed up with child resistant push through foil ( 20 micron aluminium foil /15 micron PVC film )

The tablets are available in packs of 100 tablets

### 6.6 Special precautions for disposal and other handling

No special instructions for use/handling

## 7. Marketing authorisation holder

Emzor Pharmaceutical Industries Limited

Flowergate Mixed Development Scheme.Km 1

Sagamu/Benin ERxpressway,Sagamu,OgunState.

## 8. Marketing authorisation number(s)

04-0411

## 9. Date of first authorisation/renewal of the authorisation

June 1987

## 10. Date of revision of the text

June 2012