

**Caplets** 

### Composition

### **Sedamol Caplets**

Each caplet contains Paracetamol 500 mg.

#### Action

Paracetamol is a para-aminophenol derivative that exhibits analgesic and anti—pyretic activity. Its mechanism of action is believed to include inhibition of prostaglandin synthesis, primarily within the central nervous system. It is given by mouth or rectally (suppositories) for mild to moderate pain and fever.

The lack of peripheral prostaglandin inhibition confers important pharmacological properties such as the maintenance of the protective prostaglandins within the gastrointestinal tract. Paracetamol is, therefore, particularly suitable for patients with a history of disease or on concomitant medication, where peripheral prostaglandin inhibition would be undesirable (such as, for example, those with a history of gastrointestinal bleeding or the elderly).

#### **Pharmacokinetics**

#### Absorption

Paracetamol is rapidly and almost completely absorbed from the gastrointestinal tract. Food intake delays paracetamol absorption.

#### Distribution

Paracetamol is distributed into most body tissues. Binding to the plasma proteins is minimal at therapeutic concentrations but increases with increasing doses.

#### Metabolism

Paracetamol is metabolised in the liver and excreted in the urine mainly as glucuronide and sulphate conjugates.

The metabolites of paracetamol include a minor hydroxylated intermediate which has hepatotoxic activity. This intermediate metabolite is detoxified by conjugation with glutathione. However, it can accumulate following paracetamol overdosage (more than 200 mg/kg or 10 g total paracetamol ingested) and, if left untreated, can cause irreversible liver damage.

Paracetamol is metabolised differently by infants and children compared to adults, the sulphate conjugate being predominant.

# Excretion

Paracetamol is excreted in the urine mainly as the glucuronide and sulphate conjugates. Less than 5% is excreted as unmodified paracetamol with 85% to 90% of the administered dose eliminated in the urine within 24 hours of ingestion. The elimination half-life varies from one to three hours.

### **Indications**

For fast effective temporary relief of pain and discomfort associated with headache, muscular aches, period pain, arthritis/osteoarthritis, toothache, migraine, cold & flu symptoms, tension headache, sinus pain/headache and backache. Reduces fever.

## Contraindications

Known hypersensitivity to Paracetamol.

Warnings and Precautions Renal and Hepatic impairment Patients who have been diagnosed with liver or kidney impairment must seek medical advice before taking this medication.

Underlying liver disease increases the risk of paracetamol-related liver damage. Patients who have been diagnosed with liver or kidney impairment must seek medical advice before taking this medication. If symptoms persist, medical advice must be sought. Keep out of sight and reach of children.

#### **Pregnancy**

Category B

Animal reproduction studies have failed to demonstrate a risk to the fetus and there are no adequate and well-controlled studies in pregnant women.

# **Nursing Mothers**

Although Paracetamol appears in very low concentration in breast milk, risk-benefit must be considered before this drug is given to nursing mothers.

If a sensitivity reaction occurs, discontinue use. Paracetamol should be given with care to patients with impaired kidney or liver function.

#### Use in children

Not recommended for children under seven years of age.

#### **Adverse Reactions**

Adverse events from historical clinical trial data are both infrequent and from small patient exposure. Accordingly, events reported from extensive post-marketing experience at therapeutic/labeled dose and considered attributable are tabulated below by System Organ Class and frequency. The following convention has been utilized for the classification of undesirable effects: very common  $(\ge 1/10)$ , common  $(\ge 1/100$ , <1/10), uncommon  $(\ge 1/1,000$ , <1/10), rare  $(\ge 1/10,000)$ , not known (cannot be estimated from available data).

Adverse event frequencies have been estimated from spontaneous reports received through post-marketing data.

Frequency	Undesirable Effect	Body System
Very rare	Thrombocytopenia	Blood and lymphatic system disorders
Very rare	Anaphylaxis Cutaneous hypersensitivity reactions including skin rashes, angioedema and Stevens Johnson syndrome	Immune system disorders
Very rare	Bronchospasm	Respiratory, thoracic and mediastinal disorders
Very rare	Hepatic dysfunction	Hepatobiliary disorders

# **Drug Interactions**

Paracetamol/ Oral Anticoagulants

Regular administration of Paracetamol may enhance the activity of coumarin anticoagulants, when given concurrently. Occasional doses have no significant effect.

Paracetamol/ Hepatic Enzyme-inducing Agents

Concurrent administration of enzyme inducers and Paracetamol may decrease the therapeutic effect of Paracetamol, probably because of increased metabolism resulting from induction of hepatic microsomal enzyme activity.

Paracetamol/ Salicylates/ Other Non-steroidal Anti-inflammatory Drugs

Chronic high-dose administration of Paracetamol with salicylates and/or other non-steroidal antiinflammatory drugs increases the risk of analgesic nephropathy.

## Paracetamol/Zidovudine

Paracetamol may competitively inhibit hepatic glucuronidation of zidovudine and decrease its clearance from the body. Zidovudine may also inhibit the hepatic glucuronidation of Paracetamol. Concurrent use should be avoided, because the toxicity of either or both medications may be potentiated.

## **Diagnostic Interference**

Blood Glucose

Blood glucose determinations, when measured by the glucose oxidase/peroxidase method, may be falsely decreased; but probably not when measured by the hexokinase/glucose-6-phosphate dehydrogenase (G6PD) method.

#### Serum Uric Acid

Falsely increased serum uric acid values may occur when the phosphotungstate uric acid test method is used.

# Urine 5-Hydroxyindoleacetic Acid (5-HIAA)

Qualitative screening tests using nitrosonaphthol may produce false-positive test results. The quantitative test is unaffected.

#### Pancreatic Function Test using Bentiromide

Administration of Paracetamol prior to the bentiromide test will invalidate the test results, because Paracetamol is also metabolized to an arylamine and will therefore increase the apparent quantity of para-aminobenzoic acid (PABA) recovered. It is recommended that Paracetamol be discontinued at least three days prior to administration of bentiromide.

## **Dosage and Administration**

Adults and children aged 12 years and over: 1 to 2 tablets every four to six hours as required. Maximum of 8 tablets in 24 hours. Do not use for more than a few days at a time in adults without medical advice.

Children 7 to 12 years: ½ to 1 tablet every four to six hours as required. Maximum of 4 tablets in 24 hours. Should not be used for more than 48 hours for children 7 – 17 except on medical advice.

Take with water or other fluid.

Do not exceed the stated dose.

Should not be used with other paracetamol-containing products.

Minimum dosing interval: 4 hours.

# **Over Dosage**

# **Manifestations**

In massive over dosage, Paracetamol may cause hepatic toxicity. Early symptoms following a potentially hepatotoxic overdose may include nausea, vomiting, diaphoresis, and general malaise. Clinical and laboratory evidence of hepatic toxicity may not be apparent until 48-72 hours postingestion.

Serious toxicity or fatalities are extremely infrequent in children, possibly due to differences in the way they metabolize Paracetamol. An acute overdose of less than 150 mg/kg body weight in children has not been associated with hepatic toxicity.

# Treatment

**Adults and Adolescents** 

Regardless of the quantity of Paracetamol reported or assumed to have been ingested, N-acetylcysteine should be administered immediately, if 24 hours or less have elapsed from the time of ingestion.

An initial dose of 150 mg N-acetylcysteine/kg body weight is infused I.V. in 200 ml of 5% Dextrose Injection over 15 minutes. This followed by I.V. infusion of 50 mg N-acetylcysteine/kg body weight in 500 ml of 5% Dextrose Injection over the next 4 hours, and 100 mg N-acetylcysteine/kg body weight in 1 litre of 5% Dextrose Injection over the next 16 hours (providing a total dose of 300 mg/kg body weight of N-acetylcysteine over 20 hours).

In addition to N-acetylcysteine administration, it is recommended that the stomach be emptied promptly by lavage, or by induction of emesis with syrup of ipecac.

A serum paracetamol assay should be obtained as early as possible, but not less than 4 hours following ingestion.

Liver function tests should be performed initially, and repeated at 24-hour intervals.

#### Children

Induce emesis-using syrup of ipecac.

A serum Paracetamol assay should be obtained as soon as possible, but not less than 4 hours following ingestion. If the assay indicates that, more than 150 mg/kg body weight has been ingested, or if a Paracetamol assay is not available but it is estimated that such an amount has indeed been ingested, N-acetylcysteine therapy should be initiated and continued for a full course.

The dosage and administration of N-acetylcysteine in children is the same as recommended for adults and adolescents. However, the quantity of I.V. fluid used in children should be modified, taking into account both age and weight.

Presentation
Sedamol Caplets
Box of 20 caplets.