Part II

Summary of Product Characteristics

1 NAME OF THE MEDICINAL PRODUCT

Elyzol 25% w/w Dental Gel

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each 1 g contains: Metronidazole benzoate corresponding to 250 mg metronidazole.
Each 0.3 g contains: Metronidazole benzoate corresponding to 75 mg of metronidazole.

3 PHARMACEUTICAL FORM

A white to off-white dental gel in a disposable applicator containing an amber coloured Type I glass cartridge with bromobutyl/chlorobutyl or bromobutyl rubber stoppers in both ends, the pierceable end being covered with an aluminium cap.

4 CLINICAL PARTICULARS

4.1 Therapeutic Indications

The treatment of adult periodontitis in patients in whom the condition has recurred after conventional treatment.

4.2 Posology and method of administration

Dosage is individual, depending upon the number of teeth to be treated.

Treatment should not normally be repeated within six months of initial therapy.

The gel is administered by means of a dental syringe provided with a flexible and blunted needle.

4.3 Contraindications

Known hypersensitivity to metronidazole.

4.4 Special warnings and precautions for use

In some patients, metronidazole may have an effect similar to that of disulfiram on the metabolism of alcohol, resulting in intolerance symptoms.

4.5 Interaction with other medicinal products and other forms of interaction

Some potentiation of anticoagulant therapy has been reported when metronidazole has been used with the warfarin type oral anticoagulants. Metronidazole and disulfiram taken concurrently may cause a confusional condition.

4.6 Pregnancy and lactation

Pregnancy:
Metronidazole should not be given during the first trimester of pregnancy unless it is considered essential.

Lactation:
Metronidazole is excreted in milk, but the risk of affecting the child seems unlikely with therapeutic doses.

4.7 Effects on ability to drive and use machines

None.

4.8 Undesirable effects

Because of the low plasma concentrations after local application of the dental gel, the risk of systemic side-effects is low. The most frequent side-effects are local and occur directly in connection with the application, such as bitter taste and temporary local tenderness. Headache has been reported.

4.9 Overdose

Not applicable.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: An antibiotic active against the micro-organisms predominanting in the subgingival flora in adult periodontitis.

Pharmacodynamic actions: Metronidazole acts bactericidally on Bacteroides spp., Fusobacterium, Selenomonas, Wolinella, Spirochetes and other obligate anaerobes. In addition, certain facultative anaerobic bacteria, such as *Actinobacillus actinomycetemcomitans,* are sensitive to the concentrations reached locally in the gingival pocket. Aerobic bacterial flora is not affected.

5.2 Pharmacokinetic properties

Absorption: The total bioavailability is about 70%.

Distribution: After application of Elyzol dental gel, concentrations of metronidazole above 100 microgram/ml have been measured in the gingival pocket for at least 8 hours. Concentrations above 1 microgram/ml (the MIC_{90} value for most obligate anaerobes is below 1 microgram/ml) were still measurable at 36 hours. The concentration exceeds MIC_{90} for *Actinobacillus actinomycetecomitans* for at least 8 hours.
The maximum serum concentration is reached after 4 hours. Concentrations above 1.3 microgram/ml have not been found. Protein binding: 10-15%. Metronidazole is lipid-soluble and penetrates well; it crosses the blood-brain barrier.

Metabolism: Metronidazole is metabolised chiefly in the liver by hydroxylation and oxidation and conjugates with glucuronic acid. The biologically active metabolite, hydroxymetronidazole, has a half-life of 9-19 hours.

Elimination: Metronidazole is excreted mainly with the urine, in which 15-20% is recovered unchanged and the remainder as metabolites. The plasma half-life is 6-8 hours. A certain amount is eliminated in the bile.

5.3 Preclinical safety data

None.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Glycerol mono-oleate
Sesame oil
Water for injection

6.2 Incompatibilities

Not applicable.

6.3 Shelf Life

Three years.

6.4 Special precautions for storage

Store below 25°C.

6.5 Nature and contents of container

Cartons of 2 X 0.3g or 2 X 1g disposable applicators containing Elyzol 25% Dental Gel. Each applicator contains an amber coloured Type I glass cartridge with bromobutyl/chlorobutyl or bromobutyl rubber stoppers in both ends, the pierceable end being covered with an aluminium cap.

6.6 Special precautions for disposal of a used medicinal product or waste materials derived from such medicinal product and other handling of the product

Use each applicator on one patient during one session of treatment only. If only part is used, the remainder should be discarded.

7 MARKETING AUTHORISATION HOLDER

Colgate-Palmolive (UK) Limited
Guildford Business Park
Middleton Road
Guildford
Surrey GU2 8JZ
United Kingdom

8 MARKETING AUTHORISATION NUMBER

PA 320/9/1

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 16 August 1993

Date of last renewal: 16 August 2003

10 DATE OF REVISION OF THE TEXT

January 2005