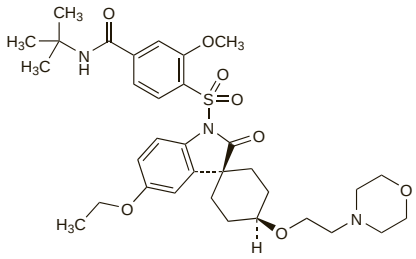
Satavaptan *(rINN)* ⊗

Satavaptán; Satavaptanum; SR-121463 (satavaptan); SR-121463B (satavaptan phosphate). *N-tert*-Butyl-4-({cis-5′-ethoxy-4-[2-(morpholin-4-yl)ethoxy]-2′-oxo-1′,2′-dihydrospiro[cyclohexane-1:3′-indole]-1′-yl}sulfonyl)-3-methoxybenzamide.

Сатаваптан

$C_{33}H_{45}N_3O_8S$ = 643.8.

CAS — 185913-78-4 (satavaptan); 308145-17-7 (satavaptan phosphate).



Profile

Satavaptan is a selective vasopressin V_2-receptor antagonist under investigation for the treatment of hyponatraemia in the syndrome of inappropriate antidiuretic hormone secretion.

◊ References.

1. Soupart A, *et al.* Successful long-term treatment of hyponatremia in syndrome of inappropriate antidiuretic hormone secretion with satavaptan (SR121463B), an orally active nonpeptide vasopressin V -receptor antagonist. *Clin J Am Soc Nephrol* 2006; **1:** 1154–60.

Saxitoxin

Saxitoxina.

CAS — 35523-89-8.

Profile

Saxitoxin is a neurotoxin associated with paralytic shellfish poisoning. It is an endotoxin produced by species of dinoflagellate plankton present in infected molluscs.

◊ References.

1. Halstead BW, Schantz EJ. *Paralytic shellfish poisoning*. Geneva: WHO, 1984.
2. WHO. Aquatic (marine and freshwater) biotoxins. *Environmental Health Criteria 37*. Geneva: WHO, 1984. Available at: http://www.inchem.org/documents/ehc/ehc/ehc37.htm (accessed 24/07/08)
3. Hartigan-Go K, Bateman DN. Redtide in the Philippines. *Hum Exp Toxicol* 1994; **13:** 824–30.
4. Gessner BD, *et al.* Hypertension and identification of toxin in human urine and serum following a cluster of mussel-associated paralytic shellfish poisoning outbreaks. *Toxicon* 1997; **35:** 711–22.
5. de Carvalho M, *et al.* Paralytic shellfish poisoning: clinical and electrophysiological observations. *J Neurol* 1998; **245:** 551–4.
6. Lehane L. Paralytic shellfish poisoning: a potential public health problem. *Med J Aust* 2001; **175:** 29–31.
7. Garcia C, *et al.* Paralytic shellfish poisoning: post-mortem analysis of tissue and body fluid samples from human victims in the Patagonia fjords. *Toxicon* 2004; **43:** 149–58.
8. Llewellyn LE. Saxitoxin, a toxic marine natural product that targets a multitude of receptors. *Nat Prod Rep* 2006; **23:** 200–22.

Schick Test

Prueba de Schick.

Pharmacopoeias. *Br.* include standards for Schick test toxin and control.

BP 2008 (Schick Test Toxin). It is prepared from a toxigenic strain of *Corynebacterium diphtheriae*. It contains a suitable antimicrobial preservative. Store at 2° to 8°.

BP 2008 (Schick Control). It is Schick Test Toxin that has been heated at a temperature not lower than 70° and not higher than 85° for not less than 5 minutes. It is prepared from the same batch of Schick Test Toxin as that with which it is to be used. Store at 2° to 8°.

Profile

Intradermal injection of Schick test toxin has been used for the diagnosis of susceptibility to diphtheria and, more importantly, to detect patients who might experience an adverse reaction to diphtheria vaccines. Children up to the age of about 8 to 10 years rarely suffer from such reactions and therefore the Schick test is not usually performed in this age group. In older children and adults a Schick test was formerly used before the use of standard diphtheria vaccines. However, diphtheria vaccines for use in adults and adolescents (p.2209) are now formulated with lesser amounts of toxoid so Schick testing is unnecessary.

Schisandra

Schizandra.

Pharmacopoeias. *Chin.* includes the dried ripe fruit of *Schisandra chinensis* (Fructus Schisandrae Chinensis) and *S. sphenanthera* (Fructus Schisandra Sphenanthera)

Profile

The dried ripe fruit of *Schisandra chinensis* or *S. sphenanthera*, sometimes referred to as schizandrae fructus, are known in Chinese medicine as wuweizi and nanwuweizi respectively. Schisandra is used in a variety of disorders and contains lignans claimed to have protective effects on the liver. The oil is also used.

The derivative bifendate has been reported to interact with ciclosporin (see p.1826). SchE (*Hezheng Pharmaceutical Company, China*), an extract of *Schisandra sphenanthera* containing amongst other ingredients deoxyschizandrin, has been reported to increase maximum blood concentrations of tacrolimus (see p.1845).

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: ***Austral.:*** Bacopa Complex; ***Indon.:*** Curliv; Curliv Plus; Hepa-Q; Hepacell; Hepamax; ***Pol.:*** Penigra; ***Rus.:*** Carmolis (Кармолис)†.

Scoparium

Broom Tops; Genêt; Genêt à Balai; Planta Genista; Retama negra; Scoparii Cacumina.

Pharmacopoeias. In *Fr.*

Profile

Scoparium is the dried tops of broom, *Sarothamnus scoparius* (*Cytisus scoparius*) (Leguminosae). It is a mild diuretic, haemostatic, and vasoconstrictor and has been given as a decoction or alcoholic extract. It has oxytocic properties and should be avoided in pregnancy. It contains sparteine (p.2391).

Preparations

Proprietary Preparations (details are given in Part 3)

Ger.: Repowine mono†; Spartiol.

Multi-ingredient: ***Fr.:*** Creme Rap; ***Ger.:*** Oxacant N†; Venacton†; ***Pol.:*** Fitoven.

Sea Buckthorn

Argousier; Sallowthorn; Sea-buckthorn.

NOTE. Distinguish from Alder Buckthorn Bark (see Frangula Bark, p.1732) and from Buckthorn (p.1713).

Profile

Sea buckthorn (*Hippophae rhamnoides*, Eleagnaceae) is the source of sea buckthorn oil, below.

Preparations

Proprietary Preparations (details are given in Part 3)

Fr.: Hippophan†.

Sea Buckthorn Oil

Profile

Sea buckthorn oil is extracted from the seeds and berries of sea buckthorn (above) and has been taken orally for skin and mucous membrane disorders and as a tonic. It has also been investigated in liver fibrosis.

Preparations

Proprietary Preparations (details are given in Part 3)

UK: Omega 7.

Seaweeds, Kelps, and Wracks

Pharmacopoeias. In *Eur.* (see p.vii).

Ph. Eur. 6.2 (Kelp; Fucus vel Ascophyllum). The fragmented dried thallus of *Fucus vesiculosus* or *F. serratus* or *Ascophyllum nodosum*. It contains not less than 0.03% and not more than 0.2% of total iodine, calculated with reference to the dried drug. It has a salty and mucilaginous taste, and an unpleasant marine odour. Protect from light.

The Ph. Eur. title was formerly Bladderwrack and the BP 2008 gives Bladderwrack and Fucus as approved synonyms.

Profile

Dried seaweeds of various species are ingredients of a number of herbal preparations.

The terms kelps and wracks have been used indiscriminately for each other and other brown seaweeds. For example, Kelp (Ph. Eur. 6.2) refers to a preparation of various species of wrack and was formerly titled Bladderwrack.

Bladder wrack (*Fucus vesiculosus*), toothed wrack (*F. serratus*), or knotted wrack (*Ascophyllum nodosum*) are included in preparations given for various disorders including obesity, constipation, and iodine deficiency.

Kelps refer properly to species of *Laminaria* and *Macrocystis*. They are present as an ingredient of several dietary supplements and herbal preparations, including for use in obesity; they have also been used as a source of iodine. Laminaria stalks (p.2330) are used for dilation of cavities or the cervix.

Fucoidan (p.2307) is a sulfated polysaccharide extracted from brown seaweeds.

Homoeopathy. *F. vesiculosus* has been used in homoeopathic medicines under the following names: Fucus v.

Adverse effects and precautions. Kelp can concentrate various heavy metals; auto-immune thrombocytopenic purpura and disordered erythropoiesis in a patient who had been taking kelp tablets for 6 weeks was attributed to the arsenic content of the preparation.[1]

Clinical hyperthyroidism has also been reported in patients taking kelp-containing preparations as part of a slimming regimen[2] or a dietary supplement.[3]

The FDA has advised that preparations containing compounds such as kelp, which may be taken orally in bulk laxatives or weight-control preparations, should be taken with a full glass of water or, if the patient has difficulty in swallowing, they should be avoided. Such compounds swell into masses that may obstruct the oesophagus if not taken with sufficient water.

1. Pye KG, *et al.* Severe dyserythropoiesis and autoimmune thrombocytopenia associated with ingestion of kelp supplements. *Lancet* 1992; **339:** 1540.
2. de Smet PA, *et al.* Hyperthyreoidie tijdens het gebruik van kelp tabletten. *Ned Tijdschr Geneeskd* 1990; **134:** 1058–9.
3. Eliason BC. Transient hyperthyroidism in a patient taking dietary supplements containing kelp. *J Am Board Fam Pract* 1998; **11:** 478–80.

Preparations

Proprietary Preparations (details are given in Part 3)

Arg.: Sual; ***Braz.:*** Redufat; ***Fr.:*** Dictyolone; Dyctiol†; ***UK:*** Adios Max; Phytoslim.

Multi-ingredient: ***Arg.:*** Arceligasol; Celu-Atlas; Centellase de Centella Queen; Centellase Gel; Herbaccion Celfin; Herbaccion Diet; KLB6 Fruit Diet; Nio Marine; Redualgas; Silueta Plus; Varisedan Gel; Yerba Diet; ***Austral.:*** Bioglan Zellulean with Escin; Gartech; Plantiodine Plus†; PMT Complex†; ***Braz.:*** Composto Anticelulitico†; Composto Emagrecedor†; Emagrevit†; Emagrex†; Obesidex†; Obesifran†; ***Canad.:*** Damiana-Sarsaparilla Formula†; Kelp B Cider Vinegar; ***Chile:*** Celltech Gold; Fucus Compuesto†; ***Cz.:*** Cajova Smes pri Redukcni Diete†; Reduktan; ***Fr.:*** Algoceanic†; Dellova†; Dragees Fuca; Duo Reparation; Marinol; Maxidraine†; Obeflorine; Prominci†; Tonimer; ***Ger.:*** Krophan N†; Viscophyll†; ***Indon.:*** Naturica DFM; ***Ital.:*** Fave di Fuca; Neoform†; Skarflex; ***Mex.:*** Lecifar-K†; ***Pol.:*** Herbaton; ***S.Afr.:*** Activex 40 Plus; ***Spain:*** Fucusor†; Lipograsil; ***UK:*** Adios; Boldex; Gerard House Water Relief Tablets; HealthAid Boldo-Plus; Kelp Plus 3; Water Naturtabs; Weight Loss Aid; ***USA:*** KLB6; ***Venez.:*** Demerung; Fugras; Lecivar Plus.

Secretin *(BAN, USAN, rINN)*

Secretina; Sécrétine; Secretinum; Sekretiini; Sekretin.

Секретин

CAS — 17034-35-4 (porcine); 108153-74-8 (human).

ATC — V04CK01.

ATC Vet — QV04CK01.

Units

The potency of secretin may be expressed as Crick-Harper-Raper (CHR) units based on the pancreatic secretion in *cats* or as clinical units, the value of which was amended in the 1960s. One clinical unit is considered to be approximately equivalent to 4 CHR units. One clinical unit is equivalent to 200 nanograms of a purified synthetic preparation of secretin.

Adverse Effects

Hypersensitivity reactions may occasionally occur. Diarrhoea has occurred in patients given high doses by intravenous infusion.

Precautions

The secretin test should be avoided in patients with acute pancreatitis. Patients should receive an intravenous test dose because of the risk of hypersensitivity reactions.

Uses and Administration

Secretin is a polypeptide hormone involved in the regulation of gastric function. It may be prepared from the duodenal mucosa of *pigs*; synthetic human and porcine versions are also available. On intravenous injection it causes an increase in the secretion by the pancreas of water and bicarbonate into the duodenum.

Secretin is used as a diagnostic agent in various disorders of the pancreas. Patients should be given an initial intravenous test dose of 1 clinical unit (200 nanograms); if no hypersensitivity reaction is noted after 1 minute, the diagnostic dose may be given.

Secretin is used alone, or with pancreozymin (p.2361) or other cholecystokinetic agents such as ceruletide (p.2279) or sincalide (p.2388), as a test for exocrine pancreatic function. The test usually involves duodenal intubation of the patient and examination of duodenal aspirate. The diagnostic dose of secretin used has varied but common doses have been 1 clinical unit/kg (200 nanograms/kg) given by slow intravenous injection.

Patients with the Zollinger-Ellison syndrome (p.1704) show an increase in gastrin when given secretin; this is in contrast to a small change or no effect in subjects without the disorder. The usual dose of secretin for the diagnosis of Zollinger-Ellison syndrome is 2 clinical units/kg (400 nanograms/kg) by slow intrave-