Sulthiame

Sulthiame, also known as sultiame, is a widely used antiepileptic drug in Europe and Israel.

Milburn-McNulty et al. searched the Cochrane Epilepsy Group's Specialised Register, the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, ClinicalTrials.gov and the WHO ICTRP Search Portal on 11 August 2015. No language restrictions were imposed. We contacted the manufacturers of sulthiame and researchers in the field to seek any ongoing or unpublished studies.

Randomised controlled add-on trials of sulthiame in people of any age with epilepsy of any aetiology.

Two review authors independently selected trials for inclusion and extracted relevant data. The following outcomes were assessed: 1) reduction in seizure frequency of 50% or greater between baseline and end of follow-up; 2) complete cessation of seizures during follow-up; 3) mean seizure frequency; 4) time to treatment withdrawal; 5) adverse drug effects; and 6) quality of life scoring. Primary analyses were intention-to-treat. We present a narrative analysis.

They included one trial with 37 participants with a new diagnosis of West syndrome. Sulthiame was given as an add-on therapy to pyridoxine. No data were reported for outcomes 1), 3) or 6). Overall risk ratio with 95% confidence intervals (CI) for complete cessation of seizures during a nine-day follow-up period versus placebo was 0.71 (95% CI 0.53 to 0.96). Meaningful analysis of time to treatment withdrawal and adverse drug effects was not possible due to incomplete data.

Sulthiame may lead to a cessation of seizures when used as an add-on therapy to pyridoxine in patients with West syndrome. The included study was small and had a significant risk of bias which limits the impact of the evidence. No conclusions can be drawn about the occurrence of adverse drug effects, change in quality of life or mean reduction in seizure frequency. No evidence exists for the use of sulthiame as an add-on therapy in patients with epilepsy outside West syndrome. Large, multi-centre randomized controlled trials are necessary to inform clinical practice if sulthiame is to be used as an add-on therapy for epilepsy [1)].

1)
Milburn-McNulty P, Powell G, Sills GJ, Marson AG. Sulthiame add-on therapy for epilepsy. Cochrane Database Syst Rev. 2015 Oct 28;10:CD009472. [Epub ahead of print] Review. PubMed PMID: 26510094.