NHS
Pan Mersey
Area Prescribing Committee

SODIUM OXYBATE oral solution for narcolepsy with cataplexy

The Pan Mersey Area Prescribing Committee recommends the prescribing of SODIUM OXYBATE oral solution, by specialists working in a regional and national tertiary commissioned sleep service only, for the treatment of narcolepsy with cataplexy in adult patients in accordance with the Aintree University Hospital Sleep Service Pathway for Narcolepsy.

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Sodium oxybate is licensed for the treatment of narcolepsy with cataplexy in adults.[1,2,3,4,5]

The Pan Mersey Area Prescribing Committee recommends the prescribing of sodium oxybate, by specialists working in a regional and national tertiary commissioned sleep service only, for the treatment of narcolepsy with cataplexy in adult patients in accordance with the Aintree University Hospital Sleep Service Pathway for Narcolepsy . Use in children (<19 years) is commissioned by NHS England.

Within Aintree University Hospital Sleep Service, sodium oxybate will be prescribed in line with the Narcolepsy Pathway:

Sodium oxybate will be used as a 5TH line treatment option after modafinil, either dexamfetamine or methylphenidate (+/- TCA / SSRI antidepressants) solriamfetol and pitolisant **in narcolepsy with cataplexy when patients have:**

- A previous adverse reaction to or lack of clinical response to-these agents in line with the recommendations of the Regional Medicines Optimisation Committee[6] and the Aintree University Hospital Narcolepsy pathway, or these agents are not tolerated or contrandicated.

Sodium oxybate may be used in favour of solriamfetol or pitolisant in patients with cataplexy for the following narcolepsy conditions where clinically appropriate:

- Narcolepsy specific issues: Significant (i.e. multiple nightly) REM intrusion phenomena, greater frequency of cataplexy e.g. >15 episodes a week
- Coexisting insomnia

Sodium oxybate is not to be used in combination with pitolisant or solriamfetol.

Following initiation, monitoring will be undertaken monthly at outpatient follow up appointments with an initial trial of 3 months. If insufficient benefit is seen at this point, sodium oxybate treatment will be discontinued.

Note: Patients who are not eligible for treatment under this statement may be considered on an individual basis where their GP or consultant believes exceptional circumstances exist that warrant deviation from the rule of this policy. In this situation, follow locally defined processes.

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Effectiveness[7]

A meta-analysis including nine randomised controlled trials reporting data on the effectiveness of sodium oxybate on narcolepsy, including symptoms of cataplexy, for a total of 1,154 patients demonstrated the effectiveness of sodium oxybate in treating major, clinically relevant narcolepsy symptoms and sleep architecture abnormalities.

Safety[2,3,4,5]

Contraindications: hypersensitivity to the active substance or to any of the excipients, major depression, succinic semialdehyde dehydrogenase deficiency, concomitant treatment with opioids or barbiturates.

Generally well tolerated. 10-20% of patients in clinical studies experienced nausea, dizziness and headaches. Other side effects occur in less than 10% of patients.

The most serious adverse reactions are suicidal attempt, psychosis, respiratory depression and convulsions.

Refer to SPC for full details.

Cost[8]

Sodium Oxybate 500mg/ml, 180ml bottle. £360.00 (EXCLUDES VAT)

Adult services are PBR excluded.

Drug	Dose Schedule	Cost per annum (dm+d)- EXCLUDES VAT
Sodium oxybate 500mg/ml oral solution	2.25g-9g daily	£3,024-£12,096
Pitolisant 4.5mg and 18mg tablets	4.5mg-36mg daily	£3,871-£7,440
Solriamfetol	75mg – 150mg daily	£2,130.24 - £2,983.68
Clomipramine capsules	10mg-75mg daily	£38.76-£174.60
Venlafaxine 225mg M/R caps	225mg daily	£93.24
Modafanil 200mg tablets	400mg daily	£146.88
Dexamfetamine 10mg tablets	10-60mg daily	£593.52-3561.12
Methylphenidate 10mg tablets	10-60mg daily	£39.60 – 334.08
Methylphenidate M/R capsules	10-60mg daily	£300.00-£1,080

Patient factors[2,3,4,5]

Locally, sleep service specialists consider reducing dose in renal impairment.

The starting dose should be halved in all patients with hepatic impairment, and response to dose increments monitored closely.

Not recommended in patients with a history of drug misuse or patients with epilepsy.

Sodium oxybate may induce respiratory depression. Patients should be assessed before treatment for sleep apnoea. Exercise caution in patients with an underlying respiratory disorder. Patients with a BMI ≥40 kg/m^2 should be monitored closely (higher baseline risk of sleep apnoea).

Elderly patients should be monitored closely for impaired motor and/ or cognitive function.

Sodium oxybate is considered high in sodium. This should be particularly taken into account for those on a low salt diet and heart failure, hypertension or compromised renal function.

Sodium oxybate is not recommended during pregnancy and should not be using during breast feeding.

Prescribing information

- Adult over 18 years, initially 2.25 g on retiring and repeated 2.5 to 4 hours later, increased according to response in steps of 1.5 g daily in 2 divided doses at intervals of 1 to 2 weeks; up to a maximum of 9 g daily in two divided doses.[2,3,4,5]
- The starting dose should be halved in all patients with hepatic impairment, and response to dose increments monitored closely. [2,3,4,5]
- Where treatment has been stopped for more than 14 days, refer to SPC for information regarding re-titration.
- Sodium oxybate is a Schedule 2 Controlled Drug.
- Sodium oxybate has the potential to induce respiratory depression. Patients should be assessed before treatment for sleep apnoea and caution should be exercised when considering treatment. Patients should be monitored for signs of respiratory depression during treatment. [2,3,4,5]

Implementation notes

- Prescribing and monitoring will be undertaken by the specialist sleep clinic.
- Patients should be supplied with a patient alert card (refer to Risk Materials available on EMC).[2,3,4,5]

References

1. European Medicines Agency. Summary of European public assessment report (EPAR) for Xyrem, updated 18 November 2021. Accessed 10 January 2022.
2. Aristo Pharma Limited. Summary of Product Characteristics; Sodium Oxybate 500mg/ml oral solution, 12 October 2020. Accessed 19 April 2022.
3. AS Kalceks. Summary of Product Characteristics; Sodium Oxybate 500 mg/ml oral solution, 07 July 2020. Accessed 19 April 2022.
4. Martindale Pharma, an Ethypharm Group Company. Summary of Product Characteristics; Sodium Oxybate 500 mg/ml oral solution, 07 July 2020. Accessed 19 April 2022.
5. UCB Pharma Limited. Summary of Product Characteristics; Xyrem 500 mg/ml oral solution, November 2021. Accessed 10 January 2022.
6. Regional Medicines Optimisation Committee (RMOC). Advisory Statement; Sodium Oxybate. Commissioning in adult patients with narcolepsy with cataplexy. Clinical decision criteria, 31 October 2019. Accessed 10 Jan 2022.
7. Boscolo-Berto R., Viel G., Montagnese S., Raduazzo D.I., Ferrara S.D., Dauvilliers Y. Narcolepsy and effectiveness of gamma-hydroxybutyrate (GHB): A systematic review and meta-analysis of randomized controlled trials. Sleep Medicine Reviews, October 2012, vol./is. 16/5(431-443), 1087-0792;1532-2955 (October 2012)
8. NHSBA Dictionary of Medicine and Devices (dm+d Browser). Accessed 10 January 2022