# Anaesthesia for electroconvulsive therapy

**Statement from the Royal College of Psychiatrists Special Committee for electroconvulsive therapy**

*Chris Freeman*

The Special Committee on Electroconvulsive Therapy (ECT) has received numerous requests for advice in the last few weeks about suitable replacement agents for methohexitone in ECT anaesthesia.

Eli Lilly/Dista indicate that methohexitone will disappear from the market completely for at least the next year because of difficulties in finding a manufacturer. It is possible that methohexitone will remain unavailable for the foreseeable future.

Our advice is as follows.

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**Methohexitone**

Methohexitone remains the drug of choice for anaesthesia in ECT.

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
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</thead>
<tbody>
<tr>
<td>Well tolerated.</td>
<td>Unavailability.</td>
</tr>
<tr>
<td>Short-acting.</td>
<td></td>
</tr>
<tr>
<td>Little effect on seizure duration.</td>
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May be associated with bradycardia and hypotension.

Comments: Some clinics have switched patients to propofol with little significant effect. Several small studies indicate effect on seizure duration does not affect overall efficacy. Some studies suggest ECT courses may be prolonged.

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**Propofol**

It is a widely used anaesthetic agent and is popular among anaesthetists.

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
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<tbody>
<tr>
<td>Well tolerated.</td>
<td>High incidence of extraneous muscle movements.</td>
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<tr>
<td>Short-acting anaesthetic with rapid recovery.</td>
<td>Pain at the injection site.</td>
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<tr>
<td>Can be useful where attenuation of hypertensive response to ECT is needed.</td>
<td>Rarely associated with adrenocortical dysfunction in repeated doses.</td>
</tr>
</tbody>
</table>

Comments: Concerns over adrenocortical dysfunction may limit use, especially in protracted ECT courses. May be suitable for patients who have brief/abortive seizures with other agents.

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**Etomidate**

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<th>Cons</th>
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<tr>
<td>Short-acting, with rapid recovery.</td>
<td>High incidence of extraneous muscle movements.</td>
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<tr>
<td>Little hangover effect.</td>
<td>Pain at the injection site.</td>
</tr>
<tr>
<td>Less associated with hypotension compared with propofol.</td>
<td>Rarely associated with adrenocortical dysfunction in repeated doses.</td>
</tr>
<tr>
<td>May lengthen seizure duration compared with methohexitone and propofol.</td>
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Comments: Concerns over adrenocortical dysfunction may limit use, especially in protracted ECT courses. May be suitable for patients who have brief/abortive seizures with other agents.

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**Sodium thiopentone**

Pros: Little documented effect on seizure threshold or duration.

Cons: Longer duration of action can delay recovery times. Longer recovery times may cause added problems in the elderly. Not widely used in anaesthetic practice. Availability may also be limited in future.
Comments: Some units report regular use of thiopentone with minimal problems.

Recommendations
Based on the present evidence the Committee feel that it is not possible to make a clear first choice recommendation as a replacement for methohexitone. There is no doubt that methohexitone remains the drug of choice.

The three agents above would seem acceptable alternatives, although there are disadvantages with each. However, since the withdrawal of methohexitone is inevitable, a choice will need to be made. It is likely that each unit needs to gain experience with more than one agent. A replacement for methohexitone should be discussed as a matter of urgency with the consultant anaesthetist responsible for ECT.

With all the above agents, some disadvantages can be minimised by using the lowest effective dose required for safe and adequate anaesthesia.

Chris Freeman, Chairman of Special Committee on ECT and Consultant Psychotherapist, University of Department of Psychiatry, Royal Edinburgh Hospital, Morningside Park, Edinburgh EH10 5EF

The College Helpline / Information Service: latest developments
Since the last report in September (Psychiatric Bulletin, Sept 1999, 23, 568) members have been busy helping the Information Service to reduce its book collection. All surplus books have been given to the British Library, enabling us to have access to them if required.

NEW SERVICE
The physical space of the Library has been redesigned. This will include comfortable study space for six readers as well as an additional area with three computer terminals and access to the internet via an ISDN line. This digital technology will make searching faster and more reliable on databases such as MEDLINE, Embase and Clinpsych. The most exciting feature will be localised online full text access to The British Journal of Psychiatry, as well as The American Journal of Psychiatry and some other key titles.

LIMITED SERVICE
However for all these changes to take place the Information Service will be moving to a temporary office. This will mean there will be a very restricted service until the end of March 2000. The service will include:

- Literature searching
- Article supply service for materials obtainable elsewhere (small charge)
- College journal articles in the last five years
- General helpline service
- Reference service

We are very grateful to all those members that have helped with the culling process. Your input has enabled us to take this forward so quickly.

The usual contact points still apply: Lucy Hastings, Information Officer, Lhastings@rcpsych.ac.uk tel: 020 7 235 2351 x138, fax: 020 7245 1231.

Visit the members website page at www.rcpsych.ac.uk for the latest information.

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