Auditing standards in electroconvulsive therapy

Seraphim Patel and colleagues discuss the development and use of an audit tool for assessing adherence to nationally agreed standards

Summary

Electroconvulsive therapy (ECT) is a valid treatment option for mental health service users with severe depression and other life-threatening mental disorders. The Royal College of Psychiatrists (2009) has issued comprehensive evidence-based standards on the clinical preparation, delivery and service specifications of ECT and this article describes the adaptation of these guidelines into a user-friendly audit tool to assess ECT services and decrease the time taken to process audit data.

Keywords

Clinical audit, Electroconvulsive therapy, audit

CLINICAL GOVERNANCE is underpinned by clinical audit, in which patient care outcomes are reviewed systematically against explicit criteria to inform service improvements at individual, team or service levels (National Institute for Clinical Excellence (NICE) 2002). Clinical audit therefore involves identifying whether, and ensuring that, best practice is being followed. The Department of Health (2010) emphasises that audits should be undertaken to help raise standards of care.

One domain of practice that must be subjected to regular and rigorous audit is electroconvulsive therapy (ECT), which involves the electrical induction of a generalised tonic-clonic convulsion to treat specific mental illnesses, notably severe depression.

Electroconvulsive therapy has been reported to be the most effective treatment for major depression, particularly when symptoms are severe (Ebmeyer et al 2006). A comprehensive systematic review of ECT has concluded that, in the short-term treatment of depressive illness, actual ECT is substantially more effective than placebo ECT, and more effective than pharmacotherapy (UK ECT Review Group 2003).

Like all treatments, ECT has side effects, and a review of patients’ perspectives on the therapy reveals that at least one third report significant memory loss after treatment (Rose et al 2003).

These findings influenced the then National Institute for Clinical Excellence to recommend, in 2003, that ECT should be undertaken to achieve rapid and short-term improvement of severe symptoms only if patients’ conditions are considered to be potentially life threatening and/or after adequate trials of other treatments have proven ineffective (NICE 2003). Since this guidance was introduced, the use of ECT has decreased (Scott 2008).

The Royal College of Psychiatrists (RCP) has subsequently published its own guidance, which argues that ECT has a role in treating major depression, the most common contemporary indication for the therapy (RCP 2005). The RCP has also issued comprehensive evidence-based standards on the clinical preparation, delivery and service specifications of ECT (RCP 2009).

All providers of ECT are encouraged to adopt these standards and seek accreditation through the ECT Accreditation Service (ECTAS), which was launched by the RCP Centre for Quality Improvement in May 2003 for this purpose.

The RCP’s standards relate to ECT administration rather than to decisions about who should receive the therapy, and in this regard are consistent with NICE guidance. The standards cover the following aspects of ECT:

- Clinics and facilities.
- Staff and training.
- Consent of patients or their families or guardians, where appropriate.
By referring to a cross-sectional survey of medical case notes, the authors sought to audit the clinical assessment and preparation of people who had undergone ECT between September 2008 and August 2009 in two local ECT clinics that provide services to four mental health units in the public and private sectors.

A proforma comprising 21 statements about the standards was designed (Figure 1) to allow the authors to compare the audit results with the ECTAS standards set out in section three of version six of the published document (RCP 2009), which has since been superseded by version seven.

Forty people had undergone treatment during the specified period. The notes of five of these patients were unavailable, while those of two related to people who had died. In total, therefore, the case notes of 33 people were audited, of which 16 (49 per cent) related to clients aged over 64 years, 21 (64 per cent) to women and 29 (88 per cent) to inpatients. The case notes were audited only after permission had been obtained from the patients’ clinical teams and all clinical data had been made anonymous.

Information from the case notes was added to 33 printed copies of the proforma, each of which could be identified by its unique bar code.

The audit was undertaken to find documented evidence that the 21 ECTAS standards had been achieved. Each of these standards was given a rating of between one and three according to its importance, whereby:

- Type one standards are essential and failure to meet them threatens patient safety or dignity.
- Type two standards are not essential but are achieved by accredited clinics.
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Assessment and preparation of patients.
Anaesthetic practice.
Administration.
Recovery, monitoring and follow up of patients.
Special precautions.
Protocols.
Table 1  Results of the first tranche of the audit

<table>
<thead>
<tr>
<th>Standard</th>
<th>Rating</th>
<th>Percentage met</th>
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<tbody>
<tr>
<td>1. The prospective electroconvulsive therapy (ECT) patient has received a formal documented assessment</td>
<td>1</td>
<td>94</td>
</tr>
<tr>
<td>2. A detailed medical history has been recorded</td>
<td>1</td>
<td>91</td>
</tr>
<tr>
<td>3. Anaesthetic risk has been assessed and recorded</td>
<td>1</td>
<td>94</td>
</tr>
<tr>
<td>4. Current medication, drug allergies and problems have been recorded</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>5. Ethnicity has been recorded</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>6. Status under the Mental Health Act 1983 has been recorded</td>
<td>2</td>
<td>97</td>
</tr>
<tr>
<td>7. An assessment of the risk and benefit balance in undergoing ECT has been considered and recorded</td>
<td>2</td>
<td>97</td>
</tr>
<tr>
<td>8. A mental state examination has been recorded</td>
<td>2</td>
<td>81</td>
</tr>
<tr>
<td>9. An assessment of quality of orientation has been recorded</td>
<td>2</td>
<td>72</td>
</tr>
<tr>
<td>10. A clear statement of why ECT has been prescribed has been included</td>
<td>2</td>
<td>97</td>
</tr>
<tr>
<td>11. The drug regimen was recorded before treatment and has been followed</td>
<td>2</td>
<td>81</td>
</tr>
<tr>
<td>12. Serum urea and electrolyte levels have been assessed and recorded</td>
<td>1</td>
<td>97</td>
</tr>
<tr>
<td>13. Taking diuretics, lithium or other vaso-active or cardiac drugs, and in those with diabetes or renal disease</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>14. Haemoglobin and blood sugar levels have been assessed and recorded immediately before each treatment in patients with diabetes</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>15. Where clinically indicated, a chest x-ray has been undertaken and recorded</td>
<td>2</td>
<td>88</td>
</tr>
<tr>
<td>16. An electrocardiogram have been recorded in each patient with renal, cardiovascular or respiratory disease, irregular pulse, heart murmur or hypertension; who is aged over 40 with diabetes; and in all men aged over 45 and women aged over 55</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>17. Hepatitis B status has been recorded in each patient who misuses drugs intravenously</td>
<td>2</td>
<td>97</td>
</tr>
<tr>
<td>18. Liver function tests have been recorded in patients with cachexia or a history of alcoholism, drug misuse or recent overdose</td>
<td>2</td>
<td>97</td>
</tr>
</tbody>
</table>

Type three standards are not essential but are achieved by ‘excellent’ accredited clinics. The completed forms were scanned and the data presented in a spreadsheet showing each aspect that has been audited, along with graphs and charts for each section.

The data were then translated using Statistical Package for the Social Sciences software into meaningful and presentable format so that cross-tabulations, trends and frequencies can be selected, with the overall aim of ensuring that the audit can be understood easily and services are improved.

Conclusion

The audit identified the extent to which ECTAS standards had been achieved, expressed as percentages. Results for most of the standards are shown in Table 1.

The results were presented at the local academic meeting where it was decided that the proforma should be submitted to the clinical governance committee, now known as the Care Quality Management committee, and will be used to re-audit services at a later date.

Find out more

Further information on the audit tool can be obtained from Seraphim Patel at seraphimpatel@nhs.net

References


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