AUDIT OF THE ECT SERVICE IN WALSALL UK AGAINST THE NATIONAL INSTITUTE OF CLINICAL EXCELLENCE (NICE) GUIDELINES

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ABSTRACT

Objective: The aim of the audit was to ensure that the referral practices and assessment methods of patients who received ECT were carried out and documented as per the NICE Guidelines 2003.

Design: Descriptive/Cross sectional study.

Place and Duration of Study: Study was carried out at Dorothy Pattison Hospital (DPH) Walsall Teaching Primary Care Trust, West Midlands, United Kingdom. Data was collected between July and August 2006.

Subjects and Methods: Study includes all the in-patients referred for ECT during a 6 month period from December 2005 to July 2006. Data was collected by looking at examination of the patient's notes to establish the adherence to all 9 standards required by NICE Guidance 2003.

Results: Total number of patients was 16 (9 females and 7 males) the results show that ECT guidelines were followed and 100% compliance was achieved in all standards except two. Firstly assessment of cognitive functions, 11 patients (69%) were assessed for their cognitive functions before the course of treatment but only 7 patients (44%) were assed after the course. Secondly previous beneficial response to ECT, documentation was done in 10 out of 13 patients (77%) who previously received ECT whilst in 3 (23%) case notes there was no documentation.

Conclusion: The adherence to standards in referral and consent procedures were excellent but Cognitive Assessment prior to, during and after treatment needs to be more carefully implemented and documented because there is high incidence of cognitive dysfunction following ECT administration.

Key word: NICE Guidance, ECT, Audit, Cognitive functions.

INTRODUCTION

Clinical audit is a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit standards and the implementation of change if required. Where indicated, changes are implemented at an individual, team, or service level and further monitoring followed by a re-audit is used to confirm improvement in healthcare delivery[1].

An audit cycle involves the following processes:

Select a topic

Decide on criteria and standards

Agree data collection rules

Collect data

Reflect on results: compare with the standards set, identify the strengths and weaknesses, e.g. knowledge, skills, attitudes, and consider potential changes.

Agree and implement change as necessary

The educational benefit from clinical audit allows a critical review of current information (keeping up to date). Audit highlights the need for specific knowledge/ information, the acquisition of new skills and the development of existing ones. Audit improves communication skills and enables attitudes to be modified when working with other members of the Care Team[1].

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Electroconvulsive therapy has been a recognised physical treatment for treating Depressive Disorders and other psychiatric conditions for decades[2]. The original treatment using electric current that was devised by Cerletti & Bini[3] has been significantly modified over the years.

In UK a major survey of the practice of ECT was carried out with detailed recommendations to further improve the prevalent practices[4]. Later the Special Committee on ECT of the Royal College of Psychiatrists published its second report that introduced specific standards covering each area of ECT practice. These standards covered the areas around the facilities, equipment, practice, personnel and training[2].

Another Audit published in 1998 showed that, given the low standards in 1981, improvements by 1998 were modest, with only one-third of clinics meeting the College standards[5].

In 1997 under the direction of Department of Health UK, National institute for Clinical Excellence (NICE) was established, NICE is an agency of the National Health Service charged with promoting clinical excellence in NHS service providers in England and Wales, by developing guidance and recommendations on the effectiveness of treatments and medical procedures. The Institute is also responsible for assessing the safety and efficacy of interventional procedures for diagnosis and treatment. It was made responsible for providing National guidance on the promotion of good health and the prevention and treatment of ill health[6]. NICE published its first Guidance for ECT in 2003[6].

These guidelines provide explicit standards to audit against and are therefore an excellent tool for service improvement.

In view of this background a clinical audit was initiated at Dorothy Pattison Hospital (DPH) Walsall to find out whether ECT services at DPH had implemented the NICE Guidance and were delivering the service accordingly.

It may be worth mentioning that the ECT unit at DPH is also ECT Accreditation Service (ECTAS) approved. ECTAS was set up by the Royal College of Psychiatrist[7]. Its purpose is to ensure and improve the quality of the administration of ECT. Participating clinics undergo a process of self and peer-review. The Royal College of Psychiatrists' Education, Training and Standards Committee award an accreditation rating to clinics that meet the essential standards. At the time of the current audit ECTAS had assigned Type 2 rating to ECT Clinic at DPH, that is a standard that an accredited clinic would be expected to meet.

SUBJECTS AND METHODS

We included all the patients referred to Dorothy Pattison Hospital Walsall for ECT during a 6 month period from December 2005 to July 2006.

The audit was registered with the audit department of Walsall PCT and an audit tool was developed using the standards set by the NICE Guidance (Tables 1 & 2).

The sample size was 16 patients consisting of 9 females and 7 males. Data was collected by the audit team between July and August 2006 by retrospective examination of the case notes for the patients receiving ECT during the defined period. Where required, contact was made with the team doctors to clarify any doubts. Results were finalised by December 2006.

RESULTS

Here are our results in relation to each of the standard of NICE Guideline for ECT

Standard 1: Documented diagnosis of the indication for ECT (Fig. 1)

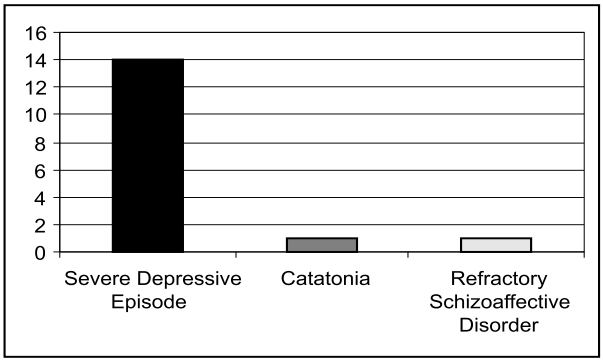

Figure 1

Compliance required	100%
Compliance achieved	100%

The diagnosis was documented in all 16 patients.

The majority of patients 14 (87.4%) suffered from a depressive illness. A further 1(6.3%) was diagnosed as having a schizophrenic illness and 1(6.3%) of Refractory Schizophrenia/Schizoaffective Disorder. The diagnosis mentioned here are those made by the treating consultant psychiatrists.

Standard 2: Within the patient's notes is there formal documentation that a full assessment of the potential risks and benefits of ECT has been carried out.

The assessment should include:

Anaesthetic Risk

Current co-morbidities

Anticipated Adverse Effects

Full Physical Examination

Blood results as per departmental protocol

Table 1

NICE Standards

The following standards were obtained from the NICE Technology Appraisal–Guidance No 59.

	Aspect of standard	Compliance required
1.	The individual receiving ECT must have a diagnosis or symptoms suggestive of…. – Severe Depressive Illness. – Catatonia. – A prolonged or sever manic episode.	100%
2.	An assessment of the potential risks and benefits of ECT is documented in the case notes.	100 %
3.	ECT is used only to achieve short-term improvement for severe symptoms when other treatments have proven ineffective.	100 %
4.	The individual's clinical status is assessed after each ECT session.	100 %
5.	The individual provides consent for each course of ECT treatment unless they do not have the ability to or they are detained under the Mental Health Act.	100 %
6.	The consent process includes… – Advocate and or carer input where possible – Information provided in a suitable format and language. – Explains the general risks and potential benefit of ECT. – Does not coerce the individual into consent to the treatment. – Reminds the patient that they can withdraw consent at any point.	100 %
7.	The individual's cognitive function is monitored on an ongoing basis and at the end of each treatment.	100 %
8.	ECT is stopped if… – A response is achieved. – There is evidence of adverse effects. – The individual withdraws consent.	100 %
9.	A repeat course of ECT is offered only if the individual meets standard 1 and 2 and… – Has previously responded well to an ECT. – Or all other treatment options have been reconsidered.	100 %

Compliance required – 100%

Compliance achieved – 100%

In case of formal documentation of the assessment of potential risks and benefits standard was achieved in the all 16 patient's case notes.

Standard 3: Documentation of other treatments being tried prior to referral for ECT (Fig. 2)

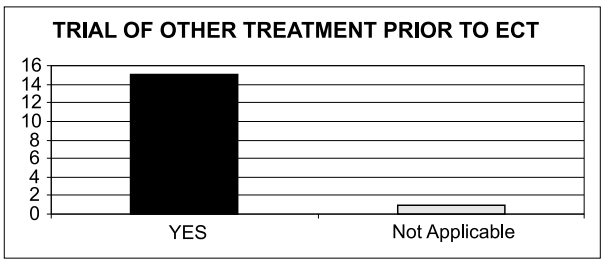

Figure 2

Compliance required 100%

Compliance achieved 100%

We found that patient 15 (94%) had been given trial of other treatments. One patient (6%) was given ECT in emergency due to life threatening condition which was clinically appropriate.

Standard 4: Within the patients' notes it is documented that their clinical status has been assessed and monitored after each ECT treatment session (Fig. 3).

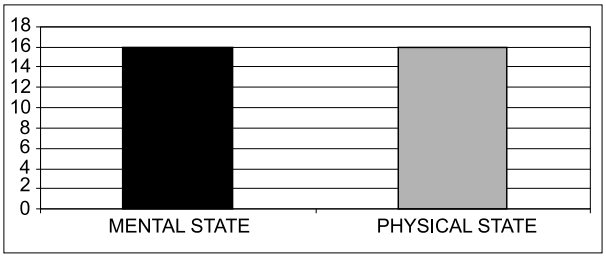

Figure 3

Table 2
Audit Tool

1 WITHIN THE PATIENTS NOTES IS THERE DOCUMENTATION OF THE DIAGNOSIS OF EITHER…..

	Yes	No	Not documented
Severe Depressive Episode			
Catatonia			
Prolonged/Severe Manic Episode			
Other			

2. Within the patients notes is there documentation of other treatments being tried prior to referral for ECT….

	Yes	No

3. Within the patients notes is there formal documentation that a full assessment of the potential risks and benefits of ECT has been carried out are:

	Yes	No
Anaesthetic Risk		
Current Co-morbidities		
Anticipated Adverse Effects		
Full Physical Examination		
Blood results as per departmental protocol.		

4. Within the patients' notes is it documented that their clinical status has been assessed and monitored after each ECT treatment session…

	Yes	No
Mental assessment		
Physical assessment		

5. Is it documented in the notes that the patient's cognitive function has been assessed.

	Formal	Informal	Not documented
Before treatment			
During treatment			
After treatment			

6. Which method of consent is documented in the patients notes…

Informed consent	
Common law	
Mental Health Act	
None Documented	

7. Is it documented that ECT sessions were stopped if….

	Yes	No	Not documented.
Pt. Achieved adequate response			
There is evidence of adverse effect			
There is evidence that the patient withdrew consent			
Completed course of ECT or No improvement seen.			

8. If the patient is offered a repeat course of ECT is it documented that they have previously responded well toECT….

	Yes
	No
Not applicable	

9. If the answer to question 8 is no, is there documentation relating to other treatments tried before considering a repeat of ECT…

Yes	No	Not Applicable

Compliance required – 100%

Standard achieved – 100%

Documentation of mental and physical state after each ECT session in patient's notes was achieved in all cases (100%).

Standard 5: The method of consent documented in the patient's notes (Fig 4).

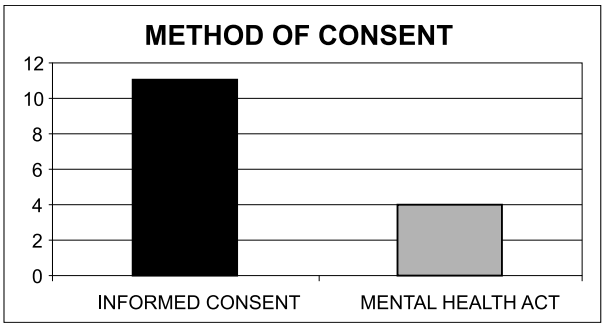

Figure 4

Compliance required 100%

Compliance achieved 100%

A comprehensive consent form was used in all cases of 12 informal patients signed by both the patient and the doctors. Four patients were detained under the Mental Health Act (1983) and consent was not legally required from them. The Mental Health Act 1983 is an Act of the Parliament of the United Kingdom but applies only to people in England and Wales. It covers the reception, care and treatment of mentally disordered persons, the management of their property and other related matters. In particular, it provides the legislation by which people suffering from a mental disorder can be detained in hospital and have their disorder assessed or treated against their wishes, unofficially known as "sectioning". Its use is reviewed and regulated by a special health authority known as the Mental Health Act Commission (MHAC). The Act allows the doctor in charge of the patient, in emergencies, to administer ECT without patients consent under Section 62 of the Act (9)[8].

Standard 6: The consent process is followed.

Compliance required 100%

Compliance achieved 100%

The consent process includes Advocate and or carer input, where possible information provided in a suitable format and language, explains the general risks and potential benefits of ECT, does not coerce the individual into consent to the treatment. It reminds the patient that they can withdraw consent at any point. Compliance was achieved in all 16 patients (100%)

Standard 7: Documentation in the notes that the patient's cognitive function is monitored on an ongoing basis and at the end of each treatment (Fig 5).

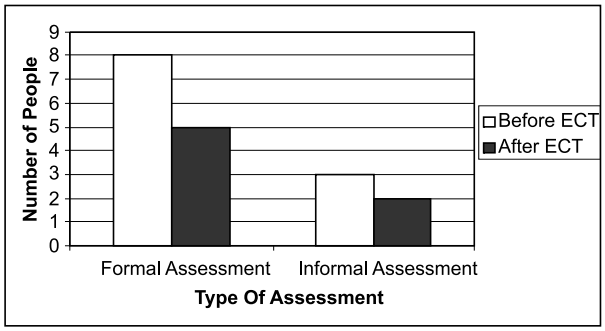

Figure 5

We were looking for the following evidence

1. Formal documentation – A formal Folstein's MMSE (Mini Mental State Examination) done and documented within the case notes.
2. Informal documentation – An enquiry about any memory impairment by the team doctors during their clinical reviews

Compliance required 100%

Compliance achieved:

11 patients (69%) were assessed for their cognitive functions before the course of treatment but only 7 patients (44%) were assed after the course. There was no documentation on formal or informal cognitive assessment prior to treatment in 5 (31%) and after the treatment in 9 (56%) of cases.

Standard 8: Documentation within the notes for the reason of stopping ECT (Fig. 6).

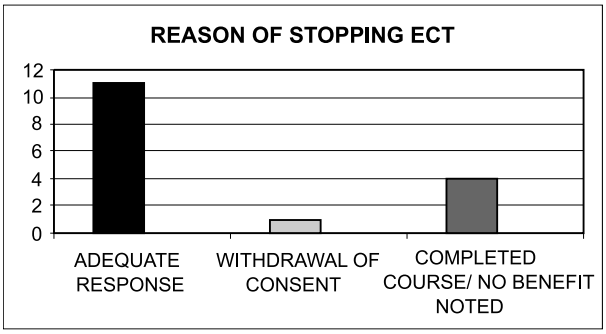

Figure 6

Compliance required 100%

Compliance achieved 100%

The reasons for stopping ECT were documented in all case notes. In 11(69%) patients it was stopped after the adequate response was achieved, 4(25%) patients had

completed the course and no benefit was achieved and 1(6%) patient withdrew the consent.

Standard 9: Documentation regarding previous beneficial response to ECT (Fig. 7)

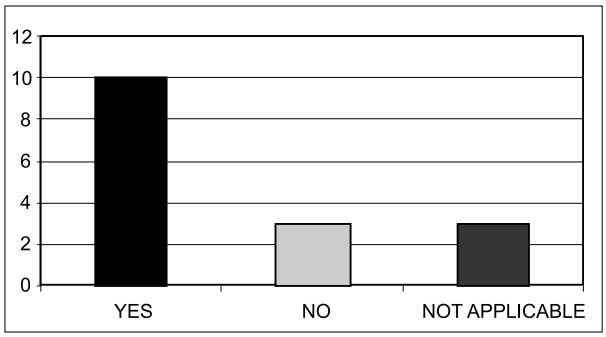

Figure 7

Compliance required 100%

Compliance achieved 77%

From figure 7 you can see that 10 (77%) patients had previous beneficial response from ECT and it was documented in the case notes whilst in 3 (23%) cases there was no documentation. In 3(23%) it was not applicable due to it being their first course of ECT

DISCUSSION

This audit highlights the importance of adhering to ECT guidelines. Although the sample size is very small, the data does signify the importance of following the guidelines.

Although we achieved 100% compliance with most standards, we fell well short of required compliance with two standards i.e. Standard 7 and 9.

The Standard 7 requires that the 'Individual's cognitive functions are monitored on an ongoing basis and at the end of each treatment. The adherence to this standard is particularly significant as memory impairment is a well known side effect of ECT treatment. The NICE Guidance based this standard on the clear evidence that the cognitive impairment occurred both immediately after the administration of an ECT and following a course of treatment. It particularly took a special note of the evidence form the observations of user's experiences relating to the adverse effects of ECT. This evidence made it apparent that the nature of the cognitive impairment by the users was often long lasting to such a degree that it outweighed their perception of any benefit from the treatment[6].

During our review of case note we were looking for both informal assessment as well as formal assessment by a tool like Folstein's Mini Mental State Examination (MMSE). This is a standardised, reliable, validated but simple tool that can be used by all front line clinical staff in any clinical setting[9].

The Standard 9 requires that a repeat course of ECT should only be considered only if the individual meets Standard 1 & 2 and has previously responded well to an ECT. If the person has not responded well to the treatment in the past then ECT should used as a last resort only after all other options have been considered and following discussion of risks and benefits with the individual and/or where appropriate with their carer/ advocate[7]. We did not find a record of beneficial response in 3 out of 13 patients where a repeat treatment had been prescribed. We acknowledge that some discussion about the rationale of using it in those patients would have taken place whilst obtaining consent. However to fully comply with the NICE standard we need to ensure that details of that discussion are clearly documented in case notes.

CONCLUSION

1. We recommended that the local ECT Protocol should be revised to include the adherence to all the standards required by NICE Guidance on ECT.
2. Upon revision of the protocol a re-audit should be conducted to complete the audit cycle in 12-18 months duration.

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