NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

GUIDANCE EXECUTIVE (GE)

Review of TA136; Structural neuroimaging in first-episode psychosis

This guidance was issued in February 2008
The review date for this guidance is January 2011

Recommendation

- A review of the guidance should be transferred to the 'static guidance' list
- That we consult on the proposal.

Consideration of options for recommendation:

Options	Comment
A review of the guidance should be planned into the appraisal work programme.	No new evidence to warrant a review
The decision to review the guidance should be deferred [to a specified date].	No evidence to suggest a review should be deferred
A review of the guidance should be combined with a review of a related technology and conducted at the scheduled time for the review of the related technology.	No related technology
A review of the guidance should be combined with a new appraisal that has recently been referred to the Institute.	No new appraisal
A review of the guidance should be incorporated into an on-going clinical guideline.	No relevant guideline
A review of the guidance should be updated into an on-going clinical guideline.*[1]	No relevant guideline
A review of the guidance should be transferred to the 'static guidance list'.	**There is no new evidence; therefore the guidance should be transferred to the 'static guidance list'.**

Original remit(s)

To appraise the clinical and cost effectiveness of structural neuroimaging (MRI and CT) to identify structural causes of first episode psychosis, and to provide guidance to the NHS in England and Wales.

Current guidance

1.1 Structural neuroimaging techniques (either magnetic resonance imaging [MRI] or computed axial tomography [CT] scanning) are not recommended as a routine part of the initial investigations for the management of first-episode psychosis.

Relevant Institute work

Published

Clinical guidelines CG38 The management of bipolar disorder in adults, children and adolescents, in primary and secondary care Issued: July 2006 Expected review date: July 2011

Clinical guidelines CG28 Depression in children and young people: identification and management in primary, community and secondary care Issued: September 2005. Currently being reviewed. Review decision date: February 2011

Clinical guidelines CG82 Core interventions in the treatment and management of schizophrenia in primary and secondary care (update) Issued: March 2009 Expected review date: March 2012

Technology appraisals TA213. Aripiprazole for the treatment of schizophrenia in people aged 15-17. Issued: January 2011. Expected review date: November 2013

In progress

Clinical guideline. Psychosis in conjunction with substance misuse: the assessment and management of psychosis with substance misuse. Publication date: March 2011

Clinical guideline. Schizophrenia: recognition and management of schizophrenia presenting up to 18 years of age. Publication date: TBC

Technology appraisals. Aripiprazole for the treatment and prevention of acute manic and mixed episodes in bipolar disorder in children and adolescents. Expected date of issue: TBC (referred January 2010).

Proposal for updating the guidance

If the guidance is to be updated as an appraisal, it would be scheduled into the work programme accordingly.

New evidence

The search strategy from the original assessment report was re-run on the Cochrane Library, Medline, Medline(R) In-Process and Embase. References

from 2006 onwards were reviewed. The results of the literature search did not identify any new trials to inform the evidence base of this appraisal.

Implementation

No submission was received from Implementation.

Equality issues

No equality issues were raised in the original guidance.

Appraisals comment:

The remit of TA136 was to determine whether the routine screening of all people presenting with first-episode psychosis (using either MRI or CT neuroimaging techniques) to identify a tumour or cyst would be clinically and cost effective compared with standard management (confirmatory MRI or CT in people thought to have an underlying structural cause). Nine of the RCT's identified in the systematic review were conducted in people with suspected first episode psychosis. A meta-analysis of the trial results could not be conducted because of the significant heterogeneity in the trial populations and incomplete reporting of results in the trials. The Assessment Group therefore conducted a threshold analysis to demonstrate the magnitude of QALY gain that would be required for the technologies to be cost effective at thresholds of £20,000 and £30,000 per QALY gained. The base case analysis conducted by the Assessment Group showed that, if the prevalence of organic psychosis due to a brain tumour or cyst lies in the region of 5%, routine structural neuroimaging with both MRI, and CT is cost saving. Sensitivity analysis demonstrated that the ICER was sensitive to the prevalence of organic psychoses caused by tumours and cysts and the proportion of patients who received hospitalised care. The Committee noted the lack of evidence regarding prevalence of treatable lesions in the population under examination. They concluded that although the routine screening (MRI and CT) of all patients presenting with first-episode psychosis to identify and treat structural causes of first-episode psychosis could have potential benefits , the evidence base was too weak to support a decision to implement its routine use in the NHS. The Committee therefore recommended that further evidence be collected from systematic studies on the clinical benefits of routine scanning with structural neuroimaging in first-episode psychosis. They also recommended that research studies evaluate whether routine screening is associated with early detection and treatment of organic causes of psychosis and improved health outcomes including effects on health-related quality of life.

The current literature search has not indicated any new evidence which will address the concerns raised by the Committee in TA136 or the further research recommendations. Therefore it is recommended that the guidance be transferred to the 'static guidance list'.

Key issues

The cost effectiveness of structural neuroimaging for first episode psychosis could not be established without further information on the prevalence of treatable lesions in the population under test. Unfortunately no further information could be found on this crucial issue, and none is anticipated. Therefore it is appropriate to move this guidance to the static list.

GE paper sign off: Janet Robertson, 11 March 2011

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