

# Are we withholding the most effective treatment for severe depression from our patients?<sup>†</sup>

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## SUMMARY

In response to an article on recent advances in the use of ECT for depression, this commentary supports earlier and more extensive use of the treatment. It challenges the belief that ECT is associated with a higher risk of cognitive deficits and mortality and points out its rapid effect compared with antidepressant medication. It calls for clinicians to remain up to date regarding ECT and consider its opportune use in severe depression.

## KEYWORDS

Electroconvulsive therapy; depressive disorders; antidepressants; education and training; cost-effectiveness.

Despite evidence highlighting again and again that electroconvulsive therapy (ECT) is the most effective treatment for major depression, both clinicians and the public remain with misconceptions and hesitancy in its use. ECT, invented in Italy during the Fascist era, appears to retain sinister and controversial associations with its introduction, regardless of its life-saving ability as a safe treatment. This stigma towards the treatment (and subsequently towards patients) is, at least in part, facilitated through anti-psychiatry groups and skewed media portrayals. A review of international media reported that 80.7% of film scenes and 72% of television scenes depicted ECT in a negative and inaccurate manner; its use being as a correctional tool or form of torture, largely unmodified (without anaesthetic or muscle relaxants) and with the intended outcome of erasing memories (Sienaert 2016).

## Keeping up with the science

The underutilisation of ECT is also thought to be due to a lack of knowledge. In order to advocate and advise our patients and their carers, we as clinicians have a responsibility to remain up to date with the ongoing advances that have made ECT even safer, more effective and appropriate. This includes the ability to counter inaccurate information to aid

balanced decision-making and relay the evidence of high-quality ECT practice.

In their *BJPsych Advances* article on ECT and physical treatments for depression, Ferrier et al provide an excellent resource for clinicians directed towards just that (Ferrier 2021). They highlight the progression of accreditation networks throughout the UK and Ireland, evidence the substantial remission rates in severe depression, the elderly and those with suicidal thoughts, and also highlight advanced techniques in the administration of ECT. Such practical developments permit individualised care, which can include the positioning of electrodes (e.g. bilateral or unilateral), the pulse width of the stimulus (brief pulse or ultra-brief pulse), dose titration, no fixed determination on the number of ECT treatments and the more emerging practice of tapering a course of ECT (based on findings from the PRIDE study) (Kellner 2016a).

## A balanced evaluation of adverse effects

Ferrier et al comment on the reported side-effects of ECT with regard to the variable evidence of adverse cognitive effects and how these are managed. A systematic review and meta-analysis of objectively measured cognitive ability determined deficits to be transient, with many variables of memory and cognition improving beyond the baseline measurements (Semkovska 2010). In discussing ECT with patients, it is necessary to highlight that major depressive episodes in themselves are associated with pronounced cognitive dysfunction. A further systematic review and meta-analysis determined that such impairments (specifically in selective attention and working and long-term memory) can persist following severe depression, and that these are exacerbated by further episodes of illness (Semkovska 2019).

Therefore, with the prevention of relapse being key, alongside the building evidence for continuation and maintenance ECT, it is encouraging to know that the number of ECT treatments does not show a correlated cumulative effect on cognitive problems (Kirov 2016).

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First received 10 May 2021  
Accepted 19 May 2021

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<sup>†</sup>Commentary on... Recent advances in electroconvulsive therapy and physical treatments for depression (<https://doi.org/10.1192/bja.2021.18>). See this issue.

### Time to change prescribing guidelines

Despite the information outlined above, and our knowledge that ECT has a more rapid effect than antidepressant medication, ECT is often considered or advised only when all other treatment options have been unsuccessful (see, for example, the UK national guidance in National Institute for Health and Care Excellence 2003). Considering that the mortality rate associated with ECT is estimated at 2.1 per 100 000 treatments (compared with 3.4 per 100 000 for those undergoing general anaesthetic for surgical procedures), it presents a safe, low-risk intervention that should not be delayed (Tørring 2017).

In their recent paper, Kellner et al propose that ECT be considered first line in acutely unwell patients with significant risk, such as suicidality or physical debilitation (Kellner 2020). They also advocate for early prescribing of ECT in severe depression. In practice, how many failed medication trials do we suggest patients undergo before ECT is offered? Are we justified in weeks of potential undertreated illness, when patients could demonstrate an improvement following just two treatments (Kellner 2016b)? Given our knowledge that shorter duration of illness is associated with better response to ECT (Kellner 2020), are we causing more harm in delaying its use?

ECT has also shown promising results in other disorders, such as in Parkinson's disease, self-injury in autism, and obsessive-compulsive disorder (Kellner 2020). However, if clinicians remain overly cautious in utilising ECT for its established evidence base in depression, are we also in danger of discouraging advances that could result in other cohorts of patients accessing a potentially life-changing treatment?

ECT remains the most effective treatment for severe depressive disorder. As psychiatrists we have a responsibility to educate ourselves,

colleagues, trainees and students on the advances made in modern ECT application. Importantly, we must not allow stigma, ignorance or misinformation to prevent the prescribing and treatment of ECT for our patients. Opening up such conversations early in the management plan demonstrates good clinical practice, reassures patients of the alternatives to pharmacological intervention and allows for exploration of treatment recommendations, options and preferences.

### Declaration of interest

None.

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