

# The New ECT News

May 2015 Edition

## 25% Fewer ECTs With Age-Based Dosing Than Titration

Age-based dosing required 25% fewer ECTs for the same clinical improvement as seizure threshold titration ( $p < 0.02$ ), in prospective study of 79 patients (Aten et al., 2015). Moreover, post-ECT the Montgomery-Asberg Depression Scale averaged 9.5 for age-based and 11.6 for titration use, while MMSE scores averaged 28 for both. ECTs were given with a Thymatron® System IV and pulse widths of 0.25-0.5 msec. The investigators expected advantages for titration but instead found that "the importance of age...possibly exceeding...an individualized approach to seizure threshold."

In age-based dosing the %Energy dial was set to age for unilateral ECT and to half-age for bilateral ECT, per standard practice since Petrides et al (1996).

Age-based dosing at 0.5 msec (or indeed any particular pulsewidth) can be consistently accomplished only with a Thymatron® instrument. Others require increasing pulsewidth to increase dose in higher dose ranges. This impairs clinical results because pulsewidths above 0.5 msec are less effective and also provoke more cognitive side-effects.

Aten JJ, et al., Eur Arch Psy Clin Neurosci 2015 Mar 25 (Epub).  
Conducted without involvement of an ECT device company.  
Petrides G et al., Conv Ther 1996;12:138

## Thymatron® ECT 60% More Effective Than Other Device Says Study Results

In clinically similar studies, remission was achieved in 87% with the Thymatron® instrument (CORE study, Petrides et al., 2001) but only 54% with the other device (Columbia group, Tew et al. 1999). ECT sessions per patient averaged 7.8 with Thymatron® but 13 with the other, suggesting shorter hospital stays and less work per patient.

Petrides G, et al. J.ECT 2001;17:244.  
Tew JD, et al. Am J Psychiatry 1999;156:1865

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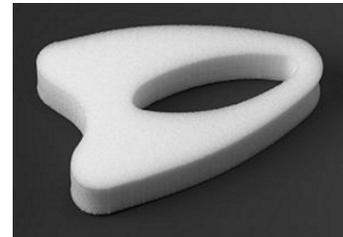
## "Guide to ECT" clinical E-book available free.

This book includes management and prevention of postictal agitation, age-based dosing and titration, anesthetics and combinations including ketamine, EEG and peak heart rate interpretation, electrode placements, quality measures, and self-assessment along with ECT basics. Keep it in your smartphone, tablet, or portable computer, or print it on 12 sheets of paper double-sided. Written for psychiatrists, residents, and ECT nurses by Conrad Swartz PhD MD. First edition August 2014. For a free copy simply email your request to [edu@thymatron.com](mailto:edu@thymatron.com) with name, degree, city, affiliated hospital name, and email address.

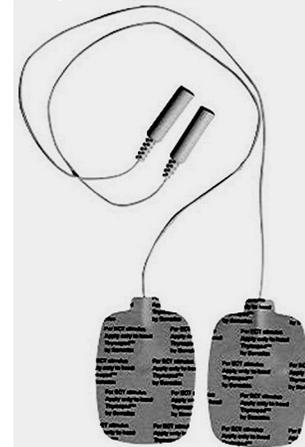
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