

ECT in Russia

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ECT in the former Soviet Union

- Corazol therapy (Meduna L.)
- First implication – 1939 (Moscow, Kiev)
- First publications: Sereisky M, Rotshtein G, Kronfield A
- Guide to ECT – 1940
- Rapid implementation (1948: used in 41 from 76 hospitals; 6,5% patients in hospital got ECT)
- Use of anesthesia (1955)

ECT former Soviet Union/Russia

- Growth of negative attitude toward ECT in 50th
- Imperfection of first devices and large number of cognitive side effect
- Low effectiveness in schizophrenia in contrast to insuline treatment
- Substantial restriction of application
- 70th: gradual "rehabilitation" of method (publication of researches data etc)

ECT in Russia in actual time

- Low availability and high demand
- Mostly in University clinics
- Moscow - 4 sites provide ECT + 2 in Moscow region (Naro-Fominsk, Podolsk)
- StPetersburg - 3 clinics
- Regions - 12 do actively, another 10 - there is an opportunity, but use not regulary
- ECT in Private psychiatric care – not exceed 4 in Russia
- No ECT register

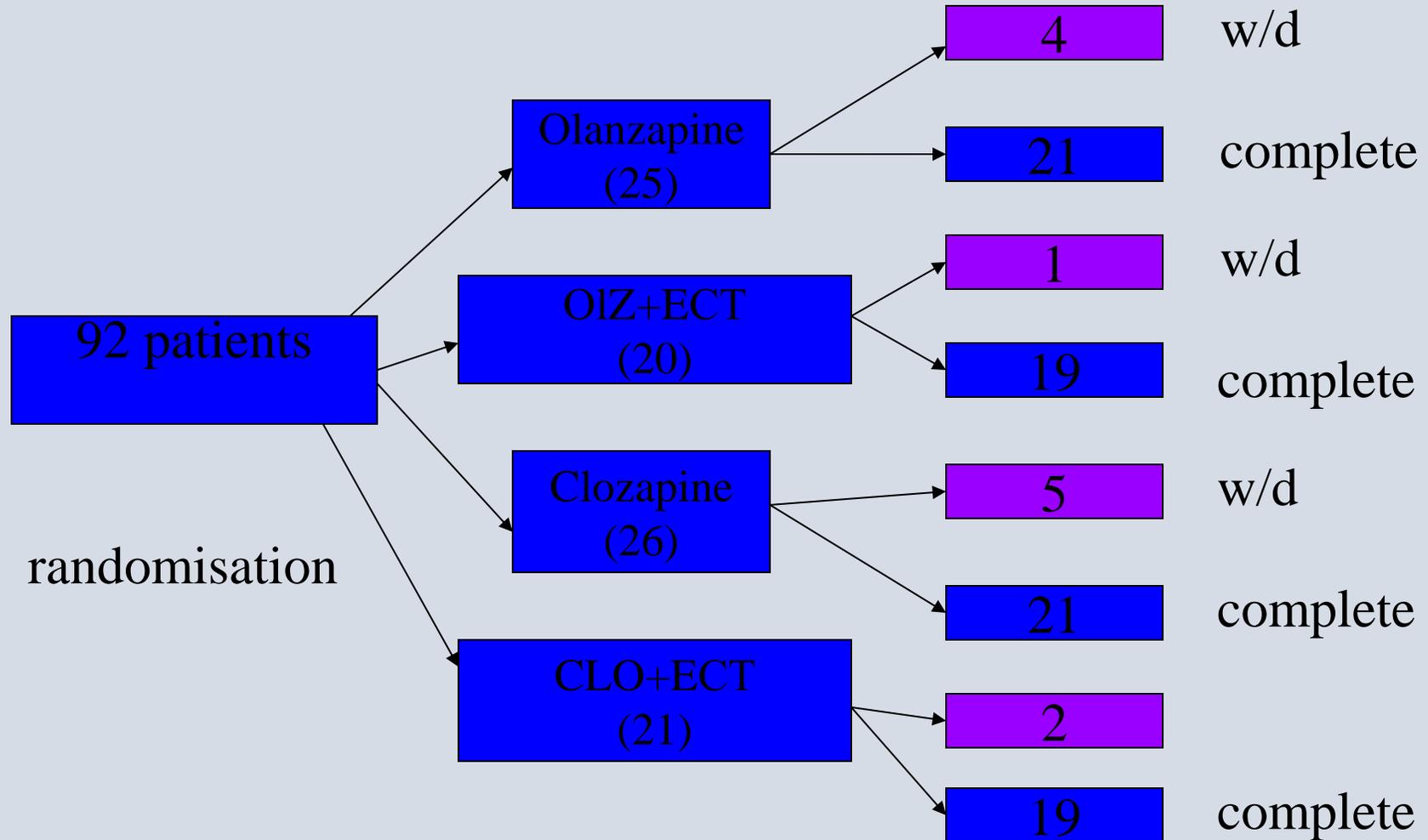
ECT in Russia in actual time

- Devices: ESTER (Russia), Elikon (Ukraine), Timatron,
- MST - not yet,
- Unilateral is less frequent than bilateral
- "Brief" impulses (higher than 0,2ms, not exceed 0,5)
- Dose titration – not everywhere
- Anesthesia - Propofol, Ketamine less often (resistant depression)
- Outpatient ECT – rarely

ECT in Russia in actual time: clinical implication

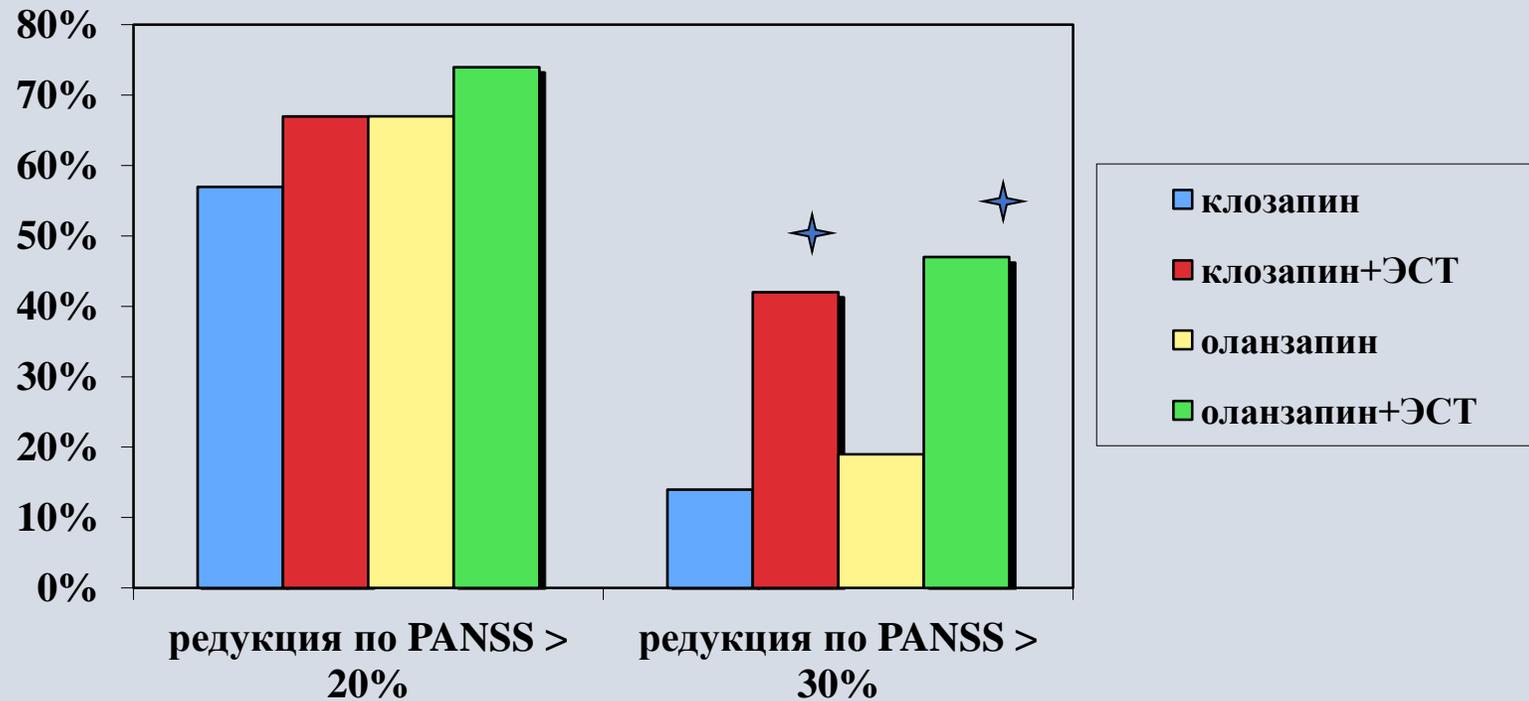
- Russians Guidelines and therapy algorithms not differs from other countries
- Clinical practice is more conservative...
- Mostly sites use in catatonia, severe and psychotic depression only
- Slow growth of interest in resistant depression
- Resistant schizophrenia (closapine+ECT)

ECT combined clozapine/olanzapine in resistant schizophrenia (Oleneva E, Tsukarzi E, Mosolov S, 2016, in russian)



Responders rate in therapeutics groups.

(Oleneva E, Tsukarzi E, Mosolov S, 2016, in russian)



p<0,05

Combined therapy vs Mono-

Predictive signs of the effectiveness of combined therapy (multiple step regression model) (Oleneva E, Tsukarzi E, Mosolov S, 2016, in russian)

	Beta Ratio	Standart deviation Beta Ratio	P
Agitation	0,521	0,128	<0,001
Emotional withdrawal	0,406	0,132	<0,01
Mannerisms & posturing	0,326	0,127	<0,05

Multiple step regression model:

$$Y = 0,521x (\text{Agitation}) + 0,406x (\text{Emotional withdrawal}) + 0,326 x (\text{Mannerism})$$

This model showed predictive characteristic values in 69% of cases and explained 44% of the observed variance.

Future of ECT in Russia

- Growing interest in practice
- Limit of new researches on ECT in Russia
- Mostly interest focused on TMS and others brain stimulation technics
- Needs for novel devices (MST etc) and biomarkers of treatment efficacy

