

ORGAN DONATION

IN TRAUMA VICTIMS

Systematic Review & Meta-Analysis

RESEARCH QUESTIONS



How often do victims of trauma donate their organs?

What is associated with organ donation in these patients?

SIGNIFICANCE



- Far more organs are required for donation to meet the demand.
- Although trauma victims represent a large pool of potential organ donors, rates and predictors of donation in these patients are poorly understood.

METHODS



Data Sources

- PubMed
- Embase
- Web of Science
- Cochrane Library
- Grey literature

Inclusion Criteria

- Rate of organ donation could be calculated:
- $$\frac{\# \text{ Potential donors}}{\# \text{ Actual donors}} \times 100\%$$

Data Analysis

- Calculated donation rates
- Meta-analysis
- Subgroups:

Traumatic cardiac arrest vs. head trauma
 Adult vs. pediatric patients
 Study publication before vs. after 2007

RESULTS



2459
Records screened

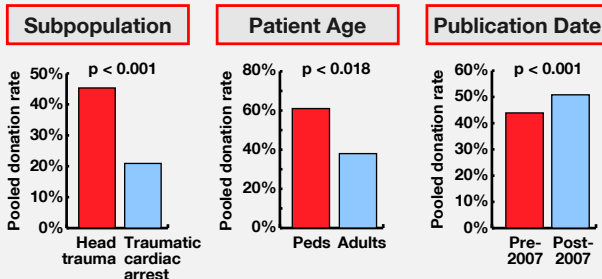


141
Full-texts screened



27
Articles included

Subgroup analysis of donation rates

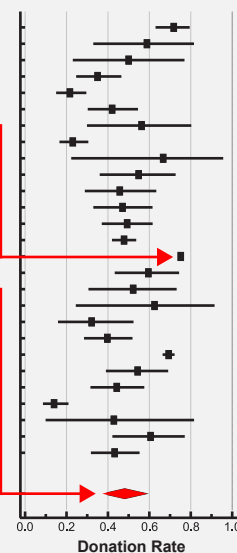


Factors associated with organ donation

- Younger age
- Head injury
- Thyroid hormone replacement
- Having brain injury guidelines in place
- Having a trauma surgeon on the organ donor council

1 study accounted for 97.8% of weight

Overall donation rate (random effects model) 48.1%



Donation rates among included studies

Donation rates ranged between 14% and 75%

TAKE HOME MESSAGE



- We have found that trauma patients who are potential organ donors successfully donate their organs only 48% of the time.

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