## VP168 Assessment Of Plasmapheresis For Alzheimer's Disease Systematic Review


### AUTHORS:

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### INTRODUCTION:

Alzheimer's disease (AD) is the most common type of dementia. Plasmapheresis is a procedure consisting of removing the plasma, or specific elements which are considered to be involved in pathological processes. Plasmapheresis could reduce the A beta peptides load in the brain. The objective is to study the safety and efficacy of plasmapheresis for AD.

### METHODS:

Systematic review, with all studies published before April 2016 reviewed. Selected studies included patients with AD treated with plasmapheresis. GRADE was used to assess quality. Efficacy outcomes include: (i) Cognitive, functional and behavior status, through Mini Mental State Examination, and Alzheimer Disease Assessment Scale-Cognitive test; (ii) Plasma and cerebrospinal fluid A beta levels; (iii) Brain-imaging and functional neuroimaging studies. Safety outcomes included side effects related to the treatment.

### RESULTS:

Two papers reporting results from three studies were selected: (i) pilot study (n = 10), (ii) its extended study (12 months more of follow-up) (n = 7), and (iii) clinical trial (n = 39). The quality of evidence was very low. About efficacy, the studies didn't report quantitative results and were inconclusive. The pilot study and its extended study reported (1): a tendency towards stabilization in cognitive status; the plasma levels of A beta peptides didn't show a clear pattern; and the brain-imaging assessment suggested a progressive volume increase in the hippocampus. The clinical trial reported in the experimental group vs control (2): a better score for the cognitive status; an increase of plasma A beta peptides; and did not find significant differences between groups for cerebrospinal fluid A beta peptides. The brain-imaging assessment showed a progressive loss of hippocampus volume in both groups. Regarding safety, the studies didn't report quantitative data. We didn't find economic evaluation studies.

### CONCLUSIONS:

The included studies had very high risk of bias and very low quality. We found no evidence on efficacy and safety of plasmapheresis treating AD. Plasmapheresis isn't a priority line in research of AD treatment.

### REFERENCES:


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## VP169 Grouping Treat-to-Target Studies In Systematic Reviews


### AUTHORS:

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### INTRODUCTION:

A Health Technology Assessment (HTA) systematic review was undertaken in rheumatoid arthritis (RA) of treat-to-target (TTT) studies (n = 16) in which studies were grouped according to: TTT versus usual care, trials comparing different targets, or trials comparing different treatment protocols. To our knowledge, this




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was the first RA TTT review where studies were grouped in this way. We wanted to compare if our approach had been adopted in reviews of hypertension, hyperlipidemia or diabetes.

### METHODS:

We searched MEDLINE for systematic reviews (SRs) of TTT studies in hypertension, hyperlipidaemia or diabetes.

### RESULTS:

Eleven SRs were included; eight were in diabetes, and four were in hypertension, while none were in hyperlipidaemia. The diabetes SRs evaluated different insulin regimens (n = 3), non-insulin medications (n = 1), any antidiabetic treatment (n = 2), metformin monotherapy versus combination therapy (n = 1), and tight versus conventional glucose control (n = 1). The metformin review grouped studies by outcome whereas all other diabetes SRs grouped studies by treatment. Two hypertension SRs evaluated the effects of any treatment on two blood pressure targets, whereas one evaluated two different treatment regimen effects on the same blood pressure target. No SR in hypertension or diabetes included a mix of TTT versus usual care, and/or same treatment protocol different targets, and/or different treatment protocols same target study designs.

### CONCLUSIONS:

In RA TTT does not refer to a single concept but a range of different approaches to the treatment of patients and the evidence reflects this. Whilst our approach to grouping RA TTT studies in a review was novel, this made it complex for us to synthesize evidence and draw general conclusions. We did not identify any TTT reviews in hypertension or diabetes including a mix of the TTT approaches we identified in RA. At present, a comparison of the strengths and limitations of our TTT review study grouping with reviews of hypertension, hyperlipidemia or diabetes cannot be made.

## VP171 The Safety Of Barbed Sutures In Cosmetic Surgery


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### INTRODUCTION:

Knotless barbed sutures can eliminate knot tying when patients are undergoing cosmetic surgery (CS). Although benefits reported on clinical outcomes are obvious, many studies have failed to demonstrate the potential for barbed sutures to mitigate adverse events. Thus, this study aimed to determine the safety of knotless barbed suture in CS.

### METHODS:

PubMed, EMBASE, Cochrane Register of Clinical Studies, and ClinicalTrials.gov were searched for randomized controlled trials (RCTs) and cohort studies comparing barbed sutures with conventional sutures in CS (until 30 June 2016). Quality assessment was conducted using Cochrane recommendations. Review Manager was applied to analyze the data, and we sequentially omitted each study to perform sensitivity analyses.

### RESULTS:

A total of five RCTs (low to moderate risk of bias) and six cohort studies (low to moderate risk of bias), proved eligible (3,481 patients). The CS included body contouring operations, breast reconstruction, lipoabdominoplasty, abdominoplasty and wound closure of cesarean delivery. Comparing to conventional sutures, pooling data showed that general adverse events of barbed sutures were not significantly different (Odds Ratio, OR = .6, 95 percent Confidence Interval, CI .24 to 1.52, P = .28), while the subgroup analysis showed that fewer adverse events occurred in cohort studies, though with high heterogeneity ($I^2$ = 87 percent). Specifically, no significant differences were shown between barbed and traditional sutures in wound dehiscence (OR = .55, 95 percent CI .29 to 1.03, P = .06), incisional infection (OR = .56, 95 percent CI .22 to 1.48, P = .25), seroma (OR = .87, 95 percent CI .42 to



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