INPLASY PROTOCOL

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Apheresis technique for Acute Hyperlipidemic Pancreatitis: A systemic review and meta-analysis

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Review question / Objective: We aimed to evaluate the clinical outcomes of an apheresis therapy compared to usual care in such a patient population.

Condition being studied: Apheresis technique for Acute Hyperlipidemic Pancreatitis. Our team members come from a tertiary hospital in China and all the members have extensive experience in treating septic shock with ECMO. Moreover, our team members have published several meta-analyses, which can guarantee the completion of the current study.

Information sources: We performed the literature search in PubMed, Embase, and Cochrane Library. We also searched reference lists of relative articles to identify potentially eligible studies.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 18 September 2021 and was last updated on 18 September 2021 (registration number INPLASY202190056).

INTRODUCTION

Review question / Objective: We aimed to evaluate the clinical outcomes of an apheresis therapy compared to usual care in such a patient population. Condition being studied: Apheresis technique for Acute Hyperlipidemic Pancreatitis. Our team members come from a tertiary hospital in China and all the members have extensive experience in treating septic shock with ECMO. Moreover, our team members have published several meta-analyses, which can guarantee the completion of the current study.

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METHODS

Participant or population: HTGP for adult patients. HTGP was defined according to established criteria.

Intervention: HTGP patients treated with apheresis technique.

Comparator: HTGP patients treated without apheresis technique.

Study designs to be included: Retrospective or prospective; cohort or case-control or randomized.

Eligibility criteria: Studies were considered for inclusion if they investigated the efficacy and safety of the apheresis technique (i.e., PE or DFPP) in treating HTGP for adult patients. HTGP was defined according to established criteria.

Information sources: We performed the literature search in PubMed, Embase, and Cochrane Library. We also searched reference lists of relative articles to identify potentially eligible studies.

Main outcome(s): Mortality, as to the most extended follow-up reported by each study author.

Quality assessment / Risk of bias analysis: We evaluated each eligible study for methodological strength using the Newcastle-Ottawa Quality Assessment Scale for cohort and case-control studies and the Cochrane risk-of-bias tool assessment for randomized trials.

Strategy of data synthesis: The Heterogeneity was tested by using the I2 statistic. An I2 50%). Publication bias was

assessed by visual inspection of funnel plots.

Subgroup analysis: (1) severity of HTGP; (2) geographic region; (3) apheresis techniques; and (4) pregnant patients; (5) anticoagulant; and (6) basal TG.

Sensitivity analysis: None

Country(ies) involved: China.

Keywords: apheresis, hypertriglyceridemiainduced pancreatitis, plasma exchange, meta-analysis.

Contributions of each author:

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