TITLE: Dialysis in Stage 5 Chronic Kidney Disease: Clinical Effectiveness and Guidelines

DATE: 16 March 2015

RESEARCH QUESTIONS

1. What is the clinical effectiveness of dialysis in outpatients with Stage 5 chronic kidney disease and no other clinical indications?

2. What are the evidence-based guidelines for dialysis in outpatients with Stage 5 chronic kidney disease and no other clinical indications?

KEY FINDINGS

Three systematic reviews were identified regarding dialysis in outpatients with Stage 5 chronic kidney disease and no other clinical indications.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2015, Issue 3), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. Methodological filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, and guidelines. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2010 and March 11, 2015. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.
SELECTION CRITERIA

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

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<th>Table 1: Selection Criteria</th>
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<tr>
<td><strong>Population</strong></td>
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<td><strong>Intervention</strong></td>
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<td><strong>Comparator</strong></td>
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<td><strong>Outcomes</strong></td>
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<td><strong>Study Designs</strong></td>
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CKD = chronic kidney disease; eGFR = estimated glomerular filtration rate; min. = minute; ml = millilitres;

RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by evidence-based guidelines.

Three systematic reviews were identified regarding dialysis in outpatients with Stage 5 chronic kidney disease (CKD) and no other clinical indications. Of note, the absence of other indications was not clearly indicated in each of the identified studies. No relevant health technology assessments or evidence-based guidelines were identified.

Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

Three systematic reviews\(^1\)\(^-\)\(^3\) were identified regarding dialysis in outpatients with Stage 5 CKD and no other clinical indications.

One systematic review\(^1\) summarized the evidence from 13 studies on the conservative management of end-stage renal disease (ESRD) without dialysis for prognosis, symptom burden, and quality of life. The authors reported mixed findings with respect to survival benefit when comparing non-dialysis with dialysis. In addition, they reported that any survival benefit from dialysis decreased with the presence of comorbidities and patients who were managed without dialysis reported a high symptom burden. The authors concluded that conservative management of ESRD was an important alternative to dialysis.\(^1\)

A systematic review with meta-analysis\(^2\) of 15 studies examined the relationship between mortality risk and early initiation of dialysis at higher estimated glomerular filtration rates (eGFR). The authors reported that early dialysis initiation was associated with a statistically significant increased risk of mortality, which may be partly explained by a greater likelihood of diabetes and the presence of severe comorbid conditions. A second systematic review with meta-analysis\(^3\) of 15 studies reported that initiation of dialysis at higher estimated GFRs was statistically significantly associated with increased risk of mortality; however, significant study heterogeneity was also noted.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified

Systematic Reviews and Meta-analyses


Guidelines and Recommendations
No literature identified

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APPENDIX – FURTHER INFORMATION:

Non-Randomized Studies


Review Articles

