Reviewer’s report

Title: The strange case of mister H. Starting dialysis at 90 years of age: clinical choices impact on ethical decisions.

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Reviewer: Nicola Panocchia

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This paper addresses a topic of interest and relevance: treatment of ESRD in the very elderly.

Numerous data indicate that for older patients RRT is not always the best therapeutic strategy, as far as prognosis and quality of life concerns.

Chronologic Age should not limit RRT access. According to ethical principles of justice and equity patients should not be discriminated for age; on the other hand, elderly frail patients may show no benefit from treatment in terms of survival and quality of life. Indeed, the treatment might be particularly burdensome for the elderly and from an ethical point of view, beneficence and non maleficence principles could not be attended

In their ethical approach, the authors have well integrated elements of principlism, patient centered medicine, narrative medicine.

The authors approach needs to be discussed, starting from the right need to tailor therapy on patient. It has to be emphasized how the authors have succeeded in tailoring therapeutic program according to the patient's needs. The key of the success is explained by the involvement of the entire nephrological team and by the narrative approach to resolving the problems of the patient. So it is confirmed that social factors are ("who delivers my meals?" said Mister H) the major concerns of patients for withholding or withdrawing dialysis.

Some points could be made clearer:

-In order to make a shared decision and to better engage the patient's autonomy an attempt to evaluate the prognosis is mandatory. The patient can decide only if he gets complete information about the state of his health, prognosis and treatment options. Have tools been used to evaluate the prognosis? (for example, couchoud score at six months). Charlson comorbidity score index (CCI) may be related to short-term survival. Surprise question can also provide an assessment element. Geriatric assestment provides information about multiple physical and mental domains: the presence of impairment at dialysis initiation is related to poor outcome. But above all, a strong predictive factor in determining short-term survival after the onset of dialysis replacement therapy is the indipendence of the patient in everyday life. An assessment of ADL, IADL and Minimental State examination are not reported.
The purpose of therapy should be clarified: maximize survival or improve quality of life and minimize the burden of treatment?

The authors argue a contraposition between dialysis and palliative care. Actually, it is not the case: Dialysis and palliative care should be integrated in so-called Kidney supportive care. It involves services that are aimed at improving the quality of life for patients CKD, at any age, and can be provided together with therapies intended to prolong life, such as dialysis. Comprehensive conservative care instead (called also active medical management without dialysis, maximal conservative management, renal supportive care, palliative care, or supportive care) does not include dialysis. The aim of this approach is symptomatic treatment of symptoms as pruritus, fluid overload, and dietary input was limited to potassium restriction. Furthermore, an approach called Palliative dialysis is described in literature. It prioritizes quality of life over survival. Palliative dialysis is a form of patient-centered dialysis in that it continues to align care with patient preferences.

The choice between dialysis and Conservative care depends on the clinical indications and the preferences of the patient. The physician is nevertheless required to propose only those treatments that may be of benefit to that single patient. Correctly the authors claim that many physicians had a negative view of dialysis and forgot that it is a life-saving treatment. However, as all invasive medical treatments, renal replacement treatments should be clinically proportionate.

Finally, the criticism of these paper concerns the prognosis: an estimated patient's prognosis is missing. Data from literature indicate that survival with conservative management and dialysis in frail elderly patients is similar but the risk of hospitalization and the burdensome for the patient are higher. The risk of the approach described by the authors - decremental dialysis plus low protein diet - is that the patient experiences the adverse effects of both therapeutic programs (e.g., vascular access, hypotension, dietary restriction, high rate hospitalization).

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
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Yes

Are the conclusions drawn adequately supported by the data shown?
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Yes

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