EDITORIAL



Home haemodialysis: a cradle of new ideas

Giorgina Barbara Piccoli^{1,2} · Hafedh Fessi³

Received: 15 July 2018 / Accepted: 23 July 2018 / Published online: 2 August 2018 © Italian Society of Nephrology 2018

"...Come l'araba fenice

Che ci sia ciascun lo dice Dove sia nessun lo sa"
"... Like the Arabian phoenix –
Everyone says it exists
But none knows where"
Wolfang Amadeus Mozart, Così fan tutte

Introduction to the series: a call for sharing experiences. Home haemodialysis is the phoenix of dialysis treatments, as beautiful and elusive as the mythological creature whose ability to rise from its own ashes it shares. Although home haemodialysis has met with different fortunes over time, it never completely disappeared, and each time it seemed that it had, it re-emerged, stronger than before, in new forms and with different approaches to treatment [1–3]. A fascinating treatment, with almost more reviews than original papers in the medical literature, home haemodialysis is context-sensitive, reflecting the social, medical and economic characteristics of each country in which it is used [4–6].

Originally conceived as a way to allow patients not accepted for hospital dialysis to obtain treatment, it transformed the "worst" patients, into the "best", allowing them to lead "nearly normal" lives [1–6]. After being widely used in highly developed countries, such as Australia and Canada, where distances make it difficult to travel between home and hospital, it was rediscovered as a means to reinvest in better dialysis schedules (daily, nightly) and has shown that the efficiency of dialysis may be too low for young patients (as was seen in pregnant patients on long nightly dialysis) and

This article is part of the topical collection on Home Haemodialysis.

- ☐ Giorgina Barbara Piccoli gbpiccoli@yahoo.it
- Dipartimento di Scienze Cliniche e Biologiche, Università di Torino, Turin, Italy
- Néphrologie, Centre Hospitalier LeMans, 194 Avenue Roubillard, 72000 Le Mans, France
- Néphrologie, Hopital Tenon, Paris, France

tolerance too low for elderly ones (the advantages of short daily dialysis) [7].

It is now a part of our history.

Yet while acknowledging these points, some physicians and policy makers are surprised by the continued interest in a treatment that is chosen, at best, by 1–3% of European and US dialysis patients, although in Australia, where it is used in up to 20% of cases in some settings, experience has shown that home haemodialysis is feasible on a larger scale, with impressively good results [4].

The list of good reasons for gathering and publishing papers on home haemodialysis, on various continents and in different contexts, is long.

Home haemodialysis can be economically advantageous, although it is true that the question of costs is not as simple as it may seem, when we take into account the fact that the recent diffusion of home haemodialysis is closely linked to daily haemodialysis schedules [8].

Home haemodialysis can serve to increase dialysis availability in settings where access to hospital dialysis is limited.

Home haemodialysis underlines the importance of patient involvement and empowerment.

In the era of personalised medicine, home haemodialysis allows us to provide tailored solutions: while representing the most efficient dialysis treatment for the young, allowing successful pregnancy in most cases, it may also prove to be the "softest" option, better tolerated by the elderly (preferably with home assistance), as its use in the Netherlands has clearly shown [9].

However, in our opinion, biased by our preference for this adaptable technique, the main strength of home haemodialysis is that, since coming into use, it has been a cradle of new ideas: whether we are thinking about dialysis in "high risk" patients, daily dialysis and nightly dialysis, or dialysis in pregnancy, many of the new ideas that have changed our attitudes and standards of care were developed while working with the home-dialysis population [1–7].

Yet the diffusion of home haemodialysis is limited, and practical information on how to organise an efficient, patient-friendly home-haemodialysis program is not readily available.





Fig. 1 Clouds at sunset. Dedicated to all our patients who seek new solutions not to lose their freedom: in homage to Davide Giuva, a young artist with more than 30 years of hemodialysis: "there may be clouds, there is always light". (Calabria, 2016. Courtesy of the Author)

It is with this in mind that we have planned the present thematic series on home haemodialysis, to gather practical insights on "how to do it", dedicated to the physicians who already do, as well as to those who wish to embark upon this fascinating experience, and to their patients.

Many of the clinicians who care for home-haemodialysis patients are more at ease in front of a dialysis machine than in front of a white page: while they are innovative and sensitive (two of the qualities needed for the management of home-haemodialysis patients), they may not be skilled writers of high-impact scientific papers.

To fully take into account the many facets of home haemodialysis, this series will be managed by three editors with different backgrounds: myself, Giorgina Piccoli, a convinced supporter of home dialysis who participated in a revival of this treatment in the late nineties in Italy; Hafedh Fessi, a silent clinician who has contributed to setting up one of the most successful new home-haemodialysis programs in France, who loves his work and detests writing. John Agar, a pioneer of home dialysis, to whom we owe the concept of ecology in dialysis, will be our reference, and the supervisor for selected papers and questions, and we are deeply grateful and proud of his participation.

We ask, therefore, that you open the drawers of your filing cabinet, take out your notes, switch on your PC, and share your experience, make us see the light of your ideas and the creativity of your solutions (Fig. 1).

Compliance with ethical standards

Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

References

- Blagg CR (2014) The first mentions of home hemodialysis were at the 1961 meeting of the American Society for Artificial Internal Organs (ASAIO). Introd Hemodial Int 18(1):1–2. https://doi. org/10.1111/hdi.12120
- Shaldon S (2006) Origin of home haemodialysis. Nephrol Dial Transpl 21(12):3610–3611
- Trinh E, Chan CT (2017) The RISE, FALL, and resurgence of home hemodialysis. Semin Dial 30(2):174–180. https://doi. org/10.1111/sdi.12572
- Agar JW (2009) International variations and trends in home hemodialysis. Adv Chronic Kidney Dis 16(3):205–214
- Masakane I, Hanafusa N, Kita T, Maeda K (2017) Recent trends in home hemodialysis therapy in Japan. Contrib Nephrol 189:54–60
- Naso A, Scaparrotta G, Naso E, Calò LA (2015) Intensive home hemodialysis: an eye at the past looking for the hemodialysis of the future. Artif Organs 39(9):736–740
- Hladunewich M, Schatell D (2016) Intensive dialysis and pregnancy. Hemodial Int 20(3):339–348
- Walker RC, Howard K, Morton RL (2017) Home hemodialysis: a comprehensive review of patient-centered and economic considerations. Clin Outcomes Res 9:149–161
- Mitsides N, Mitra S, Cornelis T (2016 Jul) Clinical, patientrelated, and economic outcomes of home-based high-dose hemodialysis versus conventional in-center hemodialysis. Int J Nephrol Renovasc Dis 9:151–159

