



Is posterior urethral valve a chronic disease, not merely a chronic kidney disease? Reflections on models of (multidisciplinary) care

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Received: 2 July 2023 / Revised: 8 July 2023 / Accepted: 10 July 2023 / Published online: 19 July 2023
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Introduction

The paper by Rickard et al., “Implementation of a standardized clinical pathway in a dedicated posterior urethral valves clinic: short-term outcomes” [1], raises a number of important points relevant to the management of this patient population. They share their short-term experience of a structured multidisciplinary clinic (MDC) for children with posterior urethral valve (PUV). While such an idea has perhaps occurred to many of us along the way, we must congratulate the authors on implementing it and sharing data-based outcomes of their early experience. There is a lot to reflect upon and learn. It strikes a chord across our specialties since most clinicians dealing with these children and their families believe that more needs to be done and these ambitions have been repeated often in the literature [2, 3]. These reviews and reflections bring out much more than the weakness of “silo care”; they point not only to a need for better co-ordinated care but also better understanding and high-end translational research to reduce long-term morbidity in this cohort.

MDC for PUV-Toronto experience by Rickard et al. [1]—what does it tell us?

The experience of the authors in the index publication facilitates a 360-degree assessment and addressing more than one aspect of effective post natal care. The authors also rightfully

discuss close collaboration with maternal–fetal teams to increase early detection of PUV; although this appears to be external to the aforementioned clinic. This is a welcome finding and will encourage other units to continue along these lines. The authors report better and early management of LUT and kidney issues in infancy compared to a non-MDC pathway [1]. These are convincing gains. The proactive management including an increase in high diversion is a novel finding which reminds us of the “circle of life.” We look forward to continued validation of this philosophy as long-term data emerge from this service. They already make a strong case for improved kidney health through their experience. There is a need to build on this as we go forward.

Should we think of PUV as a chronic disease (not merely a chronic kidney disease) in search of high-value healthcare?

I wonder whether PUV is one of many paediatric urological conditions that may benefit from being assessed through a chronic disease lens. This is akin to the plea made regarding hypospadias care [4]. High-value healthcare founded on robust principles of chronic disease management may be the way forward in PUV care [5]. This manuscript reports one of the pivotal steps in reaching this goal. Unispecialty clinics unknowingly perhaps encourage well-intended but low-value health care, i.e., where evidence suggests it confers no or very little benefit to patients, or, more broadly, the added costs of the intervention do not provide proportional added benefits [6]. Our commitment must be to push toward high-value healthcare, and a close scrutiny of existing practices is, therefore, a must [7]. MDCs have a beneficial effect in adult CKD [8]. Structuring MDCs is often at the mercy of funding rules and arrangements, both at clinician and system levels. Hence, the challenge of economic modeling of MDCs and team availabilities are likely to prove significant

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barriers in some instances. Barriers notwithstanding, we cannot assume that any multidisciplinary model can fix the obvious problems of “silo” or “unispecialty” clinics [9].

It is important to understand patient values and preferences and then structure the framework of the MDC [5, 10]. Along similar lines, parents of children with PUV feel lack of certainty and they report a negative impact proportional to CKD [11]. They also report the need for increased and better information sharing [11]. This index work did not inquire about the bladder-specific quality of life. However, Jalkanen et al. confirmed that bladder- and kidney-related QoL remain negatively affected into adulthood [12]. Furthermore, an enquiry into how children with PUV on clean intermittent catheterisation (CIC) coped with daily life was revealing. It was not surprising that CIC was perceived as a social barrier and there was a need felt for innovation to make this acceptable [13]. Furthermore, a higher incidence of neurodevelopmental issues was also reported in children with PUV [14]. These children are likely to need assessments beyond routine uro-nephrological services and should prompt further thought regarding the construct of a good MDC. Newer leads in genetic medicine are important and may significantly influence counseling and care [15]. This avenue needs to be considered as a part of the MDC.

The way forward in long-term PUV care

Adoption of chronic disease management principles and exploring newer avenues/ technologies within the multidisciplinary assessment milieu should be considered in the follow-up of children with PUV. The MDC approach holds the promise of better delineating the need for fetal interventions [16]. Leaders of MDCs should also consider avenues for advancement of understanding such as genetics and other modern technologies [15, 17]. Quantitative, longitudinal bladder assessments should be standardized and included. The MDC should also take a 360-degree approach to health assessment in an attempt to address the non-kidney medical needs as well as the social needs of the affected families. Families and patients should be involved in setting goals and priorities [5]. A well-designed MDC should look beyond “only renal health” and inquire into bladder, kidney and social quality of life scales and arrange for pre-emptive measures to support on a need basis. These will be important additions to improved physical health metrics. As we look forward to improved multidisciplinary care for children with PUV, we must congratulate the authors of this manuscript for initiating us into this important journey.

Acknowledgements I would like to thank Dr. Hugh McCarthy, paediatric nephrologist, for his suggestions.

Declarations

Conflict of interest The author declares no competing interests.

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