



EDITORIAL COMMENT

Standardized care pathway for bladder cancer in Sweden. So far lots of pain but little gain

A standardized care pathway for suspected bladder cancer was implemented in Sweden 2015 with the ambition to reduce the time to diagnosis and provide a professional care according to national guidelines. The aim of the study presented by Abuhasanein et al. in this issue of *Scand J Urol* is to compare the time intervals to diagnosis and treatment, tumor characteristics and management as well as overall survival before and after the introduction of the standardized care pathway [1]. In fact the authors of this article are members of the Swedish Bladder Cancer Group and they designed the standardized care pathway for bladder cancer.

The results are disappointing and the authors point to a need for measures to increase the adherence to standardized care pathway recommendations and to the guidelines. The authors even discuss economic punishment for non-adherence. The question that arises is why only 15% of 10,000 patients diagnosed with bladder cancer were treated within the time limits despite the enormous effort laid down since 2015. The major factor is, in our opinion, that the goals set for standardized care pathway for bladder cancer were unrealistic and not possible for the Swedish health care system to manage. The inclusion criteria were furthermore too wide and not in all aspects scientifically substantiated.

The inability to obtain the desired reduction in the time to diagnosis and treatment was one of the major disappointments. The maximal number of days from referral to transurethral resection for patients in the standardized care pathway was thus set to 13 days but disappointingly the median time that was achieved in 2016–2019 was 27 days, thus far from the goal. The waiting time was decreasing already before 2015 so the effect of the standardized care pathway is indeed mediocre. True, the reduction from 37 to 27 days to bladder cancer resection is statistically significant but is of marginal clinical significance. Time to resection was dichotomized in the study, 0–20 days or more than 20 days (Table 1 in reference 1). The proportion of patients with a waiting time of 13 days or less would in our opinion be more interesting. The time from referral to cystectomy should have been at most 37 days according to the standardized care pathway but median was far longer, 123 days [2]. Only 1% of all patients underwent cystectomy within 37 days after the date of diagnosis i.e. very far from the goal that was set. There was no improvement in tumor stage at diagnosis or survival. Furthermore, the number of missing data increased from 6% before the introduction of the standardized care pathway to 15% in 2018 indicating increasing difficulties in reporting despite the large resources allocated to the standardized care pathway.

Short waiting times are important in the care of patients with bladder cancer. However, the standardized care pathway has had little effect on waiting times for these patients. In our opinion, economic punishment for non-adherence would be contraproductive.

The inclusion criteria to the standardized care pathway were initially criticized [3,4], since women aged 40–50 years with haemorrhagic cystitis who usually become symptom-free after one day of treatment with antibiotics were included and had to undergo a cystoscopy and a CT-urography. This is hard to apprehend since studies from the UK and Sweden show that bladder cancer is diagnosed in less than 1% of patients with symptom-associated visible haematuria [4–6]. In 2018 the lower age limit was increased from 40 to 50 years, “due to the rarity of urothelial malignancy in patients younger than 50 years of age”. It is unclear why this limit was not applied already in 2015. The Swedish bladder cancer group have since kept the inclusion criteria unchanged despite the fact that the majority of the included female patients had a urinary tract infection as a cause for their haematuria [4].

When evaluating the pros and cons of standardized care pathway one must also consider costs, bother and the high radiation dose [7] for the patients who were included but not diagnosed with bladder cancer. In 2019, 18 563 patients were included but only 2075 (11%) were diagnosed with bladder cancer which is the lowest yield among all 31 standardized care pathways for cancer. There is unfortunately no information available at the cancercentrum website on age of the included patients neither on the findings of the CT-urography [2]. In a Swedish study, not a single patient out of 161 with symptom-associated macroscopic haematuria had an upper tract malignancy [6].

We suggest that bladder cancer standardized care pathway should be abandoned or undergo a major revision as previously suggested [8] after that more than 100 000 patients have been included without evident benefit. The diagnostic work-up in the standardized care pathway should be tailored to the need of the individual patient, in particular the use of CT-urography. The National Board of Health and Welfare (Socialstyrelsen) has allocated large resources in order to introduce and support all 31 standardized care pathways for malignant tumors. The standardized care pathway for bladder cancer is one of the three standardized care pathways with the highest number of included patients, largely explained by the very wide inclusion criteria, which together with the similarly wide criteria for inclusion for men with suspected prostate cancer have severely increased the burden for Swedish urology care with increasingly long

waiting times for patients with benign urological conditions. The Swedish National Audit Office (Riksrevisionen) plan to publish a report on standardized care pathway in December 2022. The Bladder Cancer Group should abandon or change the standardized care pathway as soon as possible.

Disclosure statement

No potential conflict of interest was reported by the authors.

References

- [1] Abuhasanein S, Jahnsen S, Aliabery F, et al. Standardized care pathways for patients with suspected urinary bladder cancer: the Swedish experience. *Scand J Urol.* 2022;7:1–6.
- [2] Statistik om standardiserade vårdförlopp 2022. www.cancercentrum.se.
- [3] Hedelin H, Holmäng S. Vårdförloppet för blåscancer bör omvärderas. *Läkartidningen.* 2017;114:EFLD.
- [4] Holmäng S, Hedelin H. Vårdförloppet för blåscancer bör fortfarande omvärderas. *Läkartidningen.* 2018;115:EYXX.
- [5] Vasdev N, Thorpe AC. Should the presence of a culture positive urinary tract infection exclude patients from rapid evaluation hematuria protocols? *Urol Oncol.* 2013;31(6):909–913.
- [6] Kulander O, Johansson J, Brudin L. Låg sannolikhet för cancer i urinorganen vid makroskopisk hematuri och samtidig bakteriuri. *Läkartidningen.* 2019;116:FHM2.
- [7] Brenner DJ, Hall EJ. Computed tomography – an increasing source of radiation exposure. *N Engl J Med.* 2007;357(22):2277–2284.
- [8] Holmäng S, Hedelin H, Malmström P-U. Alltför många inkluderas i vårdförlopp urinblåsecancer. *Läkartidningen.* 2019;116:FIEY.

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