Amenyogbe A, et al. A survey of physician perception and practices regarding pharmacological thromboprophylaxis during chemotherapy for bladder cancer

APPENDIX

Background:
Randomized trials have demonstrated that pharmacologic thromboprophylaxis reduces VTEs in ambulatory cancer patients, however few patients in these trials had bladder cancer and many did not receive surgery. Therefore, it is not known if the results of current RCTs apply to this population. Possible harms of pharmacologic thromboprophylaxis include bleeding. Currently, the proportion of patients with bladder cancer receiving neoadjuvant chemotherapy that receive pharmacologic thromboprophylaxis is not well defined. This multicenter survey of urologists and medical oncologists aims to gather information on their current practices and opinions in regard to thromboprophylaxis in this population.

Methods:
This is a cross sectional survey of urologist and medical oncologist that aims to determine if further study is needed to direct care for patients with bladder cancer receiving chemotherapy.

Implied consent:
Participation is voluntary. By completing this survey your consent is implied. The information you provide is for research purposes only. Answers will be anonymized through our survey software and only assessed by our research staff. Once submitted, your answers will not be able to be withdrawn. There are no conflicts of interest to declare related to this study. If you have questions please contact lulavallee@toh.ca

Authors:
Andrew Amenyogbe, David Yachnin, Kristen McAlpine, Marc Carrier, Rodney H. Breau, Domninic Bossé, Luke T. Lavallée

This survey will take 5 minutes
There are 17 questions in this survey.

Question 1
Do you manage patients with invasive bladder cancer who may receive chemotherapy (Note: If you are a urologist who refers patients for chemotherapy select Yes)?

a. Yes
b. No (End of Survey)

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SECTION 1: VTE risk in and bladder cancer

Question 2

Do you believe exposure to cisplatin-based chemotherapy increases the risk of venous thromboembolism (VTE = DVT or PE) in patients with bladder cancer?

a. Yes
b. No

Question 3

Estimate what % of patients with bladder cancer receiving neoadjuvant chemotherapy develop a VTE during their treatment (from start of chemotherapy to day prior to surgery).

a. ≤5%
b. 10%
c. 15%
d. 20%
e. >20%

Question 4

Are you familiar with the Khorana score or CATScore (D-Dimer testing), scores validated to stratify VTE risk in patients with cancer receiving chemotherapy?

a. Yes Khorana only
b. Yes CATScore only
c. Yes both
d. No neither

SECTION 2: VTE prophylaxis and chemotherapy for bladder cancer

Question 5

Do you recommend pharmacologic thromboprophylaxis (ex: direct oral anticoagulant (DOAC), heparin, Warfarin, other), for patients with bladder cancer receiving **neoadjuvant chemotherapy** or refer to another provider (ex: thrombosis) who does?

a. No - not routinely
b. Yes, but only if they are at high risk (ex: using Khorana /other stratification score)
c. Yes for most

Question 5 (continued)
What is the main reason you don't recommend pharmacologic thromboprophylaxis for patients with bladder cancer during **neoadjuvant chemotherapy**, or refer to another provider who does?

a. I don't believe there is evidence to support pharmacologic thromboprophylaxis in these patients
b. I'm concerned about bleeding risk
c. I'm don't believe pharmacologic thromboprophylaxis is necessary in these patients (the risk of VTE is not high enough to warrant prophylaxis)
d. Other (open text)

Question 6
Do you recommend pharmacologic thromboprophylaxis (ex: direct oral anticoagulant (DOAC), heparin, Warfarin, other), for patients with bladder cancer receiving **induction chemotherapy for metastatic disease** or refer to another provider (ex: thrombosis) who does?

a. No - not routinely
b. Yes, but only if they are at high risk (ex: using Khorana/other stratification score)
c. Yes for most

Question 6 (continued)
What is the main reason you don't recommend pharmacologic thromboprophylaxis for patients with bladder cancer receiving **induction chemotherapy for metastatic disease**, or refer to another provider who does?

a. I don't believe there is evidence to support pharmacologic thromboprophylaxis in these patients
b. I'm concerned about bleeding risk
c. I'm don't believe pharmacologic thromboprophylaxis is necessary in these patients (the risk of VTE is not high enough to warrant prophylaxis)
d. Other (open text)

SECTION 3: Further study

Question 7
Cohort studies have reported a rate of VTE during neoadjuvant chemotherapy for bladder cancer ranging from 10-20%. Do you feel these results require further study?

a. Yes
b. No

Question 8

What % of patients starting neoadjuvant chemotherapy do you estimate have active bleeding, or risk of bleeding, that would preclude you from offering a prophylactic pharmacologic thromboprophylaxis (or referring to another provider (ex: thrombosis) who does).

a. <25%
b. 25-50%
c. >50%

Question 9

Do you believe a randomized trial of pharmacologic thromboprophylaxis (ex: direct oral anticoagulant (DOAC), such as apixaban or other) versus placebo in patients receiving neoadjuvant chemotherapy for bladder cancer is needed to determine efficacy and safety?

a. Yes
b. No

Question 10

If a randomized trial showed pharmacologic VTE prophylaxis reduced the absolute risk of clinically-detected (symptomatic) VTEs from 12% to 5% and increased the risk of major bleeding from 2% to 3%, would you recommend VTE prophylaxis for your patients (assuming they did not have pre-existing bleeding or factors making them very high risk for bleeding)?

a. Yes
b. No

Question 11

Would you consider participating in a study randomizing your patients with bladder cancer receiving **neoadjuvant chemotherapy prior to cystectomy**, to pharmacologic thromboprophylaxis (ex: direct oral anticoagulant, such as apixaban or other) versus placebo? (Please note: your response does not imply a need to participate, only a willingness to consider participation).

a. Yes
b. No

Question 11 (continued- Yes):

How many patients do you believe your site may be able to accrue per year (best guess)?

a. <5
b. 5-10
c. 11-15
d. >15

Question 11 (continued- No):
Why not?

If a randomized trial is not feasible in this population, would a cohort study (before/after design) showing that pharmacologic thromboprophylaxis reduces VTE with a good safety (bleeding) profile be sufficient to change your practice?

a. Yes
b. No

Question 12:
Would you consider including **other patients with bladder cancer** in a study of pharmacologic thromboprophylaxis versus placebo?

a. Adjuvant chemotherapy setting
b. Induction chemotherapy for metastatic disease setting
c. All of the above

DEMOGRAPHICS

Question 13
Please indicate your specialty

a. Urology
b. Medical oncology

Question 14
Please indicate your province of work:

a. Ontario
b. Quebec
c. British Columbia
d. Alberta
e. Manitoba
f. Saskatchewan
g. Nova Scotia
h. New Brunswick
i. Newfoundland
j. Prince Edward Island

Question 15

Please indicate your years in practice

a. <5
b. 5-10
c. 11-20
d. >20

Question 16

Please provide **your email** if you would like to be contacted about a trial. Please include any other comments regarding the questions in this survey and/or the proposed clinical trial?
Please note your email will not be linked to you survey answers.

Thank you for your participation

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