

BCCA Protocol Summary for MESNA Dosage Modification for Hematuria Secondary to Oxazaphosphorines (e.g. Ifosfamide and Cyclophosphamide)

Protocol Code

SCMESNA

Tumour Group

Supportive Care

Contact Physician

Dr. Meg Knowling

MICROSCOPIC HEMATURIA

1. Transient microscopic hematuria (no more than 2 abnormal urinalyses on two separate days during a course of therapy): no modification of the oxazaphosphorine or MESNA.
2. Persistent microscopic hematuria (greater than 2 abnormal urinalyses during a course of therapy):
 - a. Do not modify the oxazaphosphorine dose.
 - b. Give initial bolus MESNA as per protocol
 - c. Then modify remaining MESNA dosing so that the dose given by constant infusion over an interval is the same as the total regular bolus dose given over that same time interval per protocol. This MESNA infusion should be given in D5W 0.45 NS and run at 150 ml/hr for a full 24 hours (from the completion of the of oxazaphosphorine).

GROSS HEMATURIA

1. Transient gross hematuria DURING OR FOLLOWING a course of therapy (only one episode, which clears to less than gross hematuria):
 - a. Do not modify the oxazaphosphorine dose.
 - b. Give initial bolus MESNA as per protocol
 - c. Then modify remaining MESNA dosing so that the dose given by constant infusion over an interval is the same as the total regular bolus dose given over that same time interval per protocol. This MESNA infusion should be given in D5W 0.45 NS and run at 150 ml/hr for a full 24 hours (from the completion of the of oxazaphosphorine).
2. Persistent gross hematuria AFTER completion of a course of therapy:
 - a. Hold subsequent oxazaphosphorine until the urine clears to less than gross hematuria. (If gross hematuria does not clear then oxazaphosphorine therapy should be discontinued.)
 - b. Once no gross hematuria, reinstitute oxazaphosphorine at full dose.
 - c. MESNA bolus dose should be given as a continuous infusion mixed with the oxazaphosphorine.
 - d. Modify the remaining MESNA dosing so that the dose given by constant infusion over a specified interval is the same as the bolus dose given over that same time interval per protocol. This MESNA infusion should be given in D5W 0.45 NS and run at 150 ml/hr for a full 24 hours (from the completion of the of oxazaphosphorine).
3. FIRST EPISODE OF persistent gross hematuria occurring **DURING** a course of oxazaphosphorine therapy.
 - a. Stop the oxazaphosphorine for that cycle and withhold further oxazaphosphorine until the time until urine clears to less than gross hematuria.
 - b. Once no gross hematuria, reinstitute oxazaphosphorine at full dose.
 - c. MESNA bolus dose should be given as a continuous infusion mixed with the oxazaphosphorine.
 - d. Modify the remaining MESNA dosing so that the dose given by constant infusion over a specified interval is the same as the bolus dose given over that same time interval per protocol. This MESNA infusion should be given in D5W 0.45 NS and run at 150 ml/hr for a full 24 hours (from the completion of the of oxazaphosphorine).

4. Occurrence of a **SECOND EPISODE of gross hematuria or persistence of microscopic hematuria** on the continuous infusion regimen:
 - a. Continue the oxazaphosphorine when the urine clears to less than gross hematuria.
 - b. **DOUBLE** the usual MESNA bolus dose should be given as a continuous infusion mixed with the oxazaphosphorine.
 - c. Modify the remaining MESNA dosing so that **DOUBLE** the dose given for the **FIRST EPISODE of persistent gross hematuria** (ABOVE #3) is given in D5W 0.45 NS and run at 150 ml/hr for a full 48 hours from the completion of the of oxazaphosphorine.
 - d. **If there is persistent gross hematuria in the face of this “double dose, continuous MESNA infusion regime”, discontinue the oxazaphosphorine.**

NB. All episodes of gross hematuria should be evaluated by cystoscopy. Other testing, such as urine culture, excretory urogram and voiding cystogram should also be considered and performed as indicated.

Call Dr. Meg Knowling at (604) 877-6000 or 1-800-663-3333 with any problems or questions regarding this treatment program.

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HEMATURIA - TABLE 1



