

# during AMRA Episode (form G)

Please complete the survey below.

Thank you!

**SIGNS (During the reaction)**

**G2.1 - RANK in order of appearance. (click the number of order for each sign)**

**You have completed ... (of Form G - during AMRA Episode)**  
**10%**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	n/a
masseter spasm: mouth cannot be fully opened, but direct laryngoscopy is possible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
masseter spasm: jaw clamped shut, intubation by direct visualization impossible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
generalized muscular rigidity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
cola colored urine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
tachypnea	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
hypercarbia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
cyanosis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
skin mottling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
sinus tachycardia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ventricular tachycardia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ventricular fibrillation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
elevated temperature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
rapidly increasing temperature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
sweating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
excessive bleeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
hypertension > 20% baseline	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
other (specify below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

G2.1.1 - If other, please specify: \_\_\_\_\_

G2.2.yr - What is the year of the first adverse sign noted?  
 \_\_\_\_\_  
 (for example, 2017)

G2.2.m - What is the month of the first adverse sign noted?  
 \_\_\_\_\_  
 (for example, 12)

---

G2.2.day - What is the day of the first adverse sign noted?

\_\_\_\_\_

(for example, 25)

---

G2.2.2 - What is the time of the first adverse sign noted?

\_\_\_\_\_

(for example, 18:30)

---

G2.3.yr - What is the year of the second adverse sign noted?

\_\_\_\_\_

(for example, 2017)

---

G2.3.m - What is the month of the second adverse sign noted?

\_\_\_\_\_

(for example, 12)

---

G2.3.day - What is the day of the second adverse sign noted?

\_\_\_\_\_

(for example, 25)

---

G2.3.2 - What is the time of second adverse sign noted?

\_\_\_\_\_

(for example, 18:30)

---

G2.4.1 - What is the maximum temperature noted in Celsius?

\_\_\_\_\_

(Celsius (?))

---

G2.4.2 - What is the maximum temperature noted in Fahrenheit?

\_\_\_\_\_

(Fahrenheit (?))

---

G2.4.yr - What is the year of the the maximum temperature noted?

\_\_\_\_\_

(for example, 2017)

---

G2.4.m - What is the month of the the maximum temperature noted?

\_\_\_\_\_

(for example, 12)

---

G2.4.day - What is the day of the the maximum temperature noted?

\_\_\_\_\_

(for example, 25)

---

G2.4.3 - What is the time of the maximum temperature noted?

\_\_\_\_\_

(for example, 18:30)

---

G2.5.1 - What is the first intraop temperature noted in Celsius?

\_\_\_\_\_

(Celsius (?))

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G2.5.2 - What is the first intraop temperature noted in Fahrenheit?

\_\_\_\_\_

(Fahrenheit (?))

G2.5.yr - What is the year of the first intraop temperature noted?

\_\_\_\_\_ (for example, 2017)

G2.5.m - What is the month of the first intraop temperature noted?

\_\_\_\_\_ (for example, 12)

G2.5.day - What is the day of the first intraop temperature noted?

\_\_\_\_\_ (for example, 25)

G2.5.3 - What is the time of the first intraop temperature noted?

\_\_\_\_\_ (for example, 18:30)

G2.6 - What's the maximum end-tidal PCO2 noted (mmHg)?

\_\_\_\_\_

G2.7.yr - What is the year of the maximum end-tidal PCO2 noted?

\_\_\_\_\_ (for example, 2017)

G2.7.m - What is the month of the maximum end-tidal PCO2 noted?

\_\_\_\_\_ (for example, 12)

G2.7.day - What is the day of the maximum end-tidal PCO2 noted?

\_\_\_\_\_ (for example, 25)

G2.7 - What is the time of the maximum end-tidal PCO2 noted?

\_\_\_\_\_ (for example, 18:30)

G2.8 - Did the temperature exceed 40??

- Yes  
 No

G2.8.1 - How long did the temperature exceed 40??

\_\_\_\_\_ (minutes)

G2.9 - Type of ventilation used at the time hypercarbia was first observed:

- spontaneous  
 assisted/pressure support  
 controlled (at the time hypercarbia 1st noted)  
 not applicable  
 Other  
 Unknown  
(check one)

G2.10 - what's the ventilation rate (liters/minute) at the time hypercarbia first noted?

\_\_\_\_\_ ((liters/minute))

**TREATMENT GIVEN**

**You have completed ... (of Form G - during AMRA Episode)**

**50%**

G3.1 - Treatment given for possible or fulminant MH:

- Volatile anesthetics discontinued (specify hours elapsed from induction)
- Anesthesia circuit changed
- Activated carbon filters in circuit
- Hyperventilation with 100% oxygen (specify max EtCO2)
- Dantrolene (specify type below: Dantrium, Revonto or Ryanodex)
- Active cooling (specify method)
- Fluid loading (specify type and volume)
- Furosemide
- Mannitol
- Glucose, insulin
- Amiodarone
- Procainamide
- Calcium
- Bicarbonate
- Albuterol
- Lidocaine
- Cardioversion or Defibrillation
- CPR
- Inotrope (specify)
- Vasopressor (specify)
- None of the above
- Other (specify)

G3.1.1 - If volatile anesthetics discontinued, how many hours elapsed from induction to discontinued time point? \_\_\_\_\_ (hrs)

G3.1.1yr - If volatile anesthetics discontinued, what is the year of discontinuation? \_\_\_\_\_ (for example, 2017)

G3.1.1mth - If volatile anesthetics discontinued, what is the month of discontinuation? \_\_\_\_\_ (for example, 12)

G3.1.1day - If volatile anesthetics discontinued, what is the day of discontinuation? \_\_\_\_\_ (for example, 25)

G3.1.1t - If volatile anesthetics discontinued, what is the time of discontinuation? \_\_\_\_\_ (for example, 18:30)

G3.1.2 - If Hyperventilation, what's the maximum EtCO2 after initiation of Hyperventilation? \_\_\_\_\_

G3.1.3 - If Dantrolene, please specify type:   
 Dantrium   
 Revonto   
 Ryanodex

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G3.1.4 - If Dantrolene, how much was the initial dose (mg)?

\_\_\_\_\_ (mgs)

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G3.1.4hr - If Dantrolene, how many hours elapsed from induction to the initial dose was given:

\_\_\_\_\_ (hrs)

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G3.1.4y - If Dantrolene, what is the year that the initial dose was given:

\_\_\_\_\_ (for example, 2017)

---

G3.1.4m - If Dantrolene, what is the month that the initial dose was given:

\_\_\_\_\_ (for example, 12)

---

G3.1.4d - If Dantrolene, what is the day that the initial dose was given:

\_\_\_\_\_ (for example, 25)

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G3.1.4t - If Dantrolene, what is the time that the initial dose was given:

\_\_\_\_\_ (for example, 18:30)

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G3.1.5 - If Dantrolene, how much was the total dose (mg)?

\_\_\_\_\_ (mgs)

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G3.1.5hr - If Dantrolene, how many hours elapsed from induction to the last dose was given:

\_\_\_\_\_ (hrs)

---

G3.1.5y - If Dantrolene, what is the year that the last dose was given:

\_\_\_\_\_ (for example, 2017)

---

G3.1.5m - If Dantrolene, what is the month that the last dose was given:

\_\_\_\_\_ (for example, 12)

---

G3.1.5d - If Dantrolene, what is the month that the last dose was given:

\_\_\_\_\_ (for example, 25)

---

G3.1.5t - If Dantrolene, what is the time that the last dose was given:

\_\_\_\_\_ (for example, 18:30)

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G3.1.6 - If Active cooling, please specify method:

\_\_\_\_\_

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G3.1.7a - If fluid loading, please specify type:

\_\_\_\_\_

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G3.1.7b - If fluid loading, please specify volume:

\_\_\_\_\_ (ml/kg)

G3.1.8 - If inotrope, please specify:

\_\_\_\_\_

G3.1.9 - If vasopressor, please specify

\_\_\_\_\_

G3.1.10 - If other, please specify:

\_\_\_\_\_

G3.2 - Were any problem noted with the dantrolene administration?

- Yes
- No

G3.3 - If dantrolene was given, mark any of the following that were noted thereafter. (check all applicable)

- Decrease in heart rate
- Decrease in end-tidal carbon dioxide or carbon dioxide tension in blood
- Decrease in temperature
- Decrease or resolution of rigidity
- None of the above

G3.3.1a - How many minutes after dantrolene administration was the maximum change of heart rate?

\_\_\_\_\_

(minutes)

G3.3.1b - What was the maximum change of heart rate (beats/min)?

\_\_\_\_\_

(beats/min)

G3.3.2a - How many minutes after dantrolene administration was the maximum change of carbon dioxide?

\_\_\_\_\_

(minutes)

G3.3.2b - What was the maximum change of carbon dioxide?

\_\_\_\_\_

G3.3.3a - How many minutes after dantrolene administration was the maximum change of temperature?

\_\_\_\_\_

(minutes)

G3.3.3b-c - What was the maximum change of temperature (Celsius)?

\_\_\_\_\_

(C)

G3.3.3b-f - What was the maximum change of temperature (Fahrenheit)?

\_\_\_\_\_

(F)

G3.3.4 - How many minutes after the start of dantrolene, did the rigidity completely resolve?

\_\_\_\_\_

(minutes)

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G3.4 - What were the observed dantrolene complications?

- excessive secretions
  - gastrointestinal upset
  - muscle weakness
  - phlebitis
  - respiratory failure
  - hyperkalemia
  - None of the above
  - other (specify)
- (check all applicable)

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G3.4.1 - If other, please specify: \_\_\_\_\_

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Congratulations. You have completed ... (of Form G - during AMRA Episode)  
100%