

SAEMS
ABDOMINAL PAIN STANDING ORDER
Self-Learning Module

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SAEMS ABDOMINAL PAIN STANDING ORDER TRAINING MODULE

PURPOSE

This SAEMS Standing Order Training Module has been developed to serve as a template for EMS provider training. The intent is to provide consistent and concise information to all providers practicing within the SAEMS Region. The content of the Training Module has been reviewed by the Protocol Development and Review Sub-Committee, and includes the specific standing order, resource and reference material, and instructions for completing the Training Module to obtain continuing education credit. One (1) hour of SAEMS continuing education credit may be issued following successful completion of the module.

OBJECTIVES

Upon completion of this learning module the participant will be able to:

1. Identify location of anatomical structures in the abdomen
2. Identify the pathology of the abdomen
3. Identify life-threatening abdominal pathology
4. Identify types of pain that can be experienced
5. Identify signs and symptoms of abdominal pain
6. Describe prehospital assessment and management of abdominal pain

INSTRUCTIONS

1. Read the self-learning module and view the PowerPoint presentation.
2. Complete the attached post test and return to your supervisor or your base hospital manager/coordinator for continuing education credit.

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INTRODUCTION

The Abdominal Pain Standing Order was originally developed in 2005, in response to an increasing number of patients presenting with the chief complaint of abdominal discomfort. Although the abdominal cavity contains most of our internal organs and is responsible for a multitude of physiologic processes, recognition and management of the acute, life-threatening case is fairly straightforward for the EMS provider.

ABDOMINAL PAIN

The complaint of abdominal pain is a common one. It is however, one of the most difficult conditions to diagnose and treat. Fortunately, EMS providers are not expected to diagnose, but are expected to assess, recognize, and treat the patient with an acute abdominal condition.

Abdominal pain represents approximately five to ten percent of all emergency department visits, many of which arrive by ambulance. The symptoms of abdominal pain can be associated with transient, mild disorders or serious disease, but determining the cause is very difficult. Pain may be the only indication of the need for surgery, with fifteen to thirty percent of abdominal pain patients requiring immediate surgical intervention. Fortunately, the majority of patients with the complaint of abdominal pain will not experience a catastrophic event.

HISTORY

Obtaining a thorough history of the patient's pain is also important in determining the pathophysiology alterations contributing to the pain, and in making judgments about appropriate supportive measures such as the implementation of the Abdominal Pain Standing Order. Many practitioners find the following mnemonic helpful in evaluating pain:

O = onset:	When did the pain begin? Was it sudden or gradual?
P = provocation:	What initiates or aggravates the pain? What makes it better? Is it aggravated by position?
Q = quality:	What is the patient's own description of the pain? Dull, sharp, crampy, burning, tearing
R = region:	Where does the pain originate?
radiation:	Is it felt in other areas?
referred:	Does it travel to other areas?
S = severity (pain scale):	What is the degree of discomfort on a scale of 1 to 10 (-to 10 or mild, moderate or severe)?
T = timing:	Is the pain constant or intermittent? Does it occur or resolve in relation to meals?

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Acute abdominal distress may be the result of conditions involving several different organ systems. According to some references there are approximately one hundred different causes of abdominal pain. The expectation of the field provider is not to diagnose, but to recognize and manage those potentially life-threatening conditions in patients complaining of abdominal pain. The SAEMS Abdominal Pain Standing Order has been developed to allow providers the freedom to assess and transport these patients with consistency in management and minimal interruption in patient care.

GLOSSARY

Ascites: the accumulation of serous fluid in the peritoneal cavity typically caused by liver disease.

Atresia: an abnormal condition in which a normal opening or tube in the body is closed or absent.

Cholecystitis: inflammation of the gallbladder.

Hematuria: the presence of blood in the urine.

Incarcerated Hernia: a hernia (a breakthrough of an organ through a tear in the muscle wall that surrounds it) that cannot be reduced without surgery.

Intussuseption: the telescoping of a length of intestine into an adjacent portion usually producing an obstruction.

Mesenteric Arterial Thrombosis: the formation of a blood clot inside a mesenteric blood vessel, obstructing the flow of blood.

Mesenteric Emboli: the migration of a clot that blocks a mesenteric blood vessel supplying the bowel.

Omphalocele: a congenital abdominal wall defect in which the intestines, liver, and occasionally other organs remain outside of the abdomen in a sac due to a defect in the development of the muscles of the abdominal wall.

Pelvic Inflammatory Disease: inflammation of the female reproductive pelvic organs.

Stenosis: a constriction or narrowing of a duct or passage.

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ABDOMINAL PAIN STANDING ORDER

Initiate Immediate Supportive Care:

- Oxygen to maintain O2 sat \geq 94%
- Complete primary and secondary survey as indicated
- Vital signs including FSBG and temperature as indicated

I
N
C
L

Use standing order on patients with complaint of abdominal pain

E
X
C
L

- Pregnant - follow [OB/GYN SO](#)
- Patients meeting [Trauma Triage Decision Scheme](#)
- Patients meeting [Critical Pediatric Triage Protocol](#)

O
R
D
E
R
S

BLS Care:

Normal Volume Status

- Initiate IV NS/LR @ TKO (if permitted)
- Transport in position of comfort with supportive measures as indicated

Volume Depleted

- Follow Normal Volume Status orders
- Bolus 20 ml/kg, reassess hemodynamic and pulmonary status at 500 ml intervals

ALS Care:

- Follow BLS orders
- If angina equivalent present, consider cardiac monitor and 12 lead ECG
- Complaints of nausea and/or vomiting follow [Nausea/Vomiting/Diarrhea SO](#)
- Consider [Pain Management SO](#)

Reference Note

Clinical Signs of Hypoperfusion/Hypovolemia/ Hypotension

- | | |
|-------------------------|------------------------|
| • Altered mental status | • Hypotension |
| • Rapid pulse | • Prolonged cap refill |
| • Hypoxia | • Cyanosis |
| • Cool Extremities | • Mottling |

Normal Vital Signs

Age	Heart Rate	Systolic BP
< 2 years of age	90-150	70 + (age in yrs x2)
2-3 years of age	80-140	70 + (age in yrs x2)
4-5 years of age	70-120	70 + (age in yrs x2)
6-9 years of age	60-115	70 + (age in yrs x2)
Over 10 years of age	60-110	\geq 90

Approved: 6/17/08

Revised: 10/08, 10/15, 6/16

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DRUG PROFILES

<http://azdhs.gov/preparedness/emergency-medical-services-trauma-system/index.php#drug-profiles>

REFERENCES

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Cunningham, C. (2008). Say a Prayer for the Pretender. *JEMS.com*. Retrieved November 13, 2008 from http://www.jems.com/news_and_articles/columns

Medical Sciences for Clinical Practice - A Self-Instructional Tutorial Curriculum Minicourse 4: The Acute Abdomen: Retrieved November 10, 2008 from http://www.ece.ncsu.edu/imaging/MedImg/SIMS/Module2/GE2_4.html

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POSTTEST

NAME: _____ DATE: _____

1. Abdominal pain is caused by:
 - a. Inflammation
 - b. Organ distention
 - c. Loss of blood supply
 - d. All of the above

2. True or False: An accurate patient history is necessary in order to best treat the patient.

3. Which pain scale should be used for children ages 4-12?
 - a. FLACC
 - b. Wong-Baker Faces
 - c. NRS
 - d. It doesn't matter

4. Organs of the right upper quadrant are:
 - a. Liver, gall bladder, spleen
 - b. Liver, gall bladder, kidney
 - c. Spleen, kidney, stomach
 - d. Gall bladder, kidney, appendix

5. Right or left upper quadrant pain can be caused by:
 - a. Acute pancreatitis
 - b. Myocardial ischemia
 - c. Cystitis
 - d. A & B

6. Abdominal pain in the lower quadrants can be caused by:
 - a. Aortic aneurysm
 - b. Cystitis
 - c. Diverticulitis
 - d. All of the above

7. The majority of non-traumatic abdominal pain patients should be transported in which position?
 - a. Supine
 - b. Left lateral recumbent
 - c. Sitting
 - d. Position of comfort

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8. Signs and symptoms of abdominal pain do not include:
 - a. Headache
 - b. Fever
 - c. Nausea
 - d. Tenderness

9. True or False: Medication can be given for pain management when using the Abdominal Pain Standing Order.

10. Patients with severe abdominal pathology will typically:
 - a. Be moving around, as they cannot get comfortable
 - b. Lie as still as possible in the fetal position
 - c. Be seated, leaning forward in an attempt to relieve the pain
 - d. All of the above

11. Pain that occurs when nerve fibers carrying the pain message cross at the spinal cord is called?
 - a. Parietal pain
 - b. Referred pain
 - c. Visceral pain
 - d. Reactionary pain

12. The highest priority when treating a patient with abdominal pain is to:
 - a. Transport the patient in the most comfortable position
 - b. Treat the patient for shock
 - c. Maintain the airway, breathing, and circulation
 - d. Palpate the abdomen for pulsating mass

13. Which of the following characteristics of visceral pain are true?
 - a. Results from irritation to the peritoneal lining
 - b. Begins as sharp, turning to dull and intermittent over time
 - c. Results from stretching of muscle fibers in organs
 - d. Indicates a non-acute abdomen

14. True or False: It is important for the prehospital provider to identify the organ system causing the abdominal pain prior to implementing the standing order.

15. An incarcerated hernia is defined as:
 - a. A hernia that needs surgical intervention
 - b. A hernia that affects prisoners
 - c. A hernia that can be reduced manually
 - d. A hernia that spontaneously reduces

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EVALUATION

Please answer the following questions by marking the appropriate response:

	Lowest Worst Least					Highest Best Most
1. To what extent did this module meet your needs?	1	2	3	4	5	
2. There was a balance between theoretical and practical information.	1	2	3	4	5	
3. The time required was appropriate to the content.	1	2	3	4	5	
4. The module increased my knowledge and understanding of the topic.	1	2	3	4	5	
5. References or audiovisuals were adequate.	1	2	3	4	5	
6. Overall, this program was worthwhile.	1	2	3	4	5	

7. Additional comments:
