Chapter 7
Anxiety

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Name and Synonyms

Anxiety, anxiety disorder, panic disorder, panic attacks

Incidence/Epidemiology

- Anxiety disorder is a very common psychiatric condition. It often manifests through physical symptoms; chest pain +/- dyspnea/hyperventilation +/- palpitations is a common presentation of anxiety disorder.
- There is no good estimate of the incidence of anxiety as a cause of chest pain that prompts medical evaluation.
- Around 25 % of individuals are thought to experience at least one panic attack in their lifetimes.

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Differential Diagnosis

- Presentation can be quite dramatic. The differential considerations for chest pain due to anxiety therefore include immediate life threats such as pulmonary embolism, acute coronary syndrome, and aortic dissection. Less severe differential considerations include pneumonia and pneumothorax, which can cause pleuritic pain; and chest wall pain.

Pathophysiology and Etiology

- Current thinking is that anxiety and panic result from an imbalance in CNS neurotransmitters.
- The diagnosis of anxiety as an etiology for chest pain that prompts medical evaluation should be made only after more serious causes have been evaluated and reasonably excluded.

Presentation

Typical/"Classic"

- The classic presentation of anxiety- or panic-related chest pain is:
  - Acute onset
  - Associated with dyspnea (the patient may confuse hyperventilation with dyspnea)
  - Associated with diaphoresis
  - Trembling or shaking
  - Fear of dying
  - Sense of loss of control
  - Nausea

Atypical

- Patients with anxiety or panic disorder may present with myriad complaints. Chest pain is common among these, but many other features may be present.

Primary Differential Considerations

- The differential diagnosis of acute anxiety is broad and includes both medical and psychiatric considerations.
- Medical:
  - Because acute anxiety may mimic acute somatic disease, one must consider such immediate life threats as acute myocardial infarction, aortic dissection, arrhythmias, pulmonary embolism, pneumothorax, or stroke.
  - Other concerns include hypo- and hyperglycemia, poisoning and drug abuse, delirium tremens, and encephalopathy.
- Psychiatric:
  - Acute anxiety may be confused with acute psychosis, conversion disorders, dissociative disorders, schizoaffective disorder, and Tourette's syndrome.

History and Physical Exam

Findings That Confirm Diagnosis

- History and physical examination are not diagnostic for anxiety.

Factors That Suggest Diagnosis

- Symptoms are out of proportion with physical findings.
- Patient-reported dyspnea is found on exam to be hyperventilation.

Video overview of the causes and treatment of hyperventilation
https://www.youtube.com/watch?v=p97HeXx0vN0

- History of anxiety or panic disorder.
- Young age and/or lack of risk factors for more serious conditions.
- Choking sensation accompanying chest pain.
- Current substance abuse.

Factors That Exclude Diagnosis

- There are no history or physical findings that conclusively exclude anxiety as a cause of chest pain.

Ancillary Studies

Laboratory

- There are no diagnostic laboratory studies for anxiety.
- Laboratory tests target suspected underlying disease.

Imaging

- There are no diagnostic imaging studies for anxiety.

Special Populations

Age and Gender

- The epidemiology of anxiety and panic disorder does not indicate any consistent patterns by age or gender. It may begin at a young age.
- Anxiety disorders are the most common psychiatric disturbances in childhood, usually representing negative outcomes of naturally occurring fears associated with childhood development.
- The literature describes multiple forms of anxiety disorders in children, including social anxiety, agoraphobia, panic attacks, separation anxiety, and specific phobias.

Co-morbidities

- It is important to consider and evaluate for the presence of serious underlying disease or psychiatric stress that could prompt situation anxiety, such as:
  - Recent death of a loved one
  - Recent relationship stress
  - Recent diagnosis of serious disease
- Other psychiatric issues may be discovered upon questioning.
- Substance abuse issues may be discovered upon questioning.

Pitfalls in Diagnosis

Critical Steps Not to Miss

- Because there are differential considerations that are immediate life threats, evaluation for acute coronary syndrome, pulmonary embolism, and pneumonia should be considered early.

Mimics

- The entire constellation of diagnoses that underlies chest pain syndrome can mimic or cause the pain and overall presentation of anxiety.

Time-Dependent Interventions

- Other than excluding life threats, there are no time-dependent interventions for chest pain deemed due to anxiety or panic disorder.
- Patients who also express suicidal or homicidal ideation should be promptly evaluated in an emergency care setting.

Overall Principles of Treatment

- Treatment of the acute symptoms of chest pain caused by panic or anxiety disorder may include:
  - Reassurance and support
  - Benzodiazepines
  - Monitoring while the effects of acute substance abuse diminish

Disease Course

- The course of patients with anxiety or panic disorder may vary widely, from no further episodes to debilitating psychiatric illness that limits or precludes productive engagement with society.

Related Evidence

Papers of particular interest have been highlighted as:
*** Of key importance*

Practice Guideline

Bandelow B, Sher L, Bunevicius R, Hollander E, Kasper S, Zohar J, Möller HJ; WFSBP Task Force on Mental Disorders in Primary Care; WFSBP Task Force on Anxiety Disorders, OCD and PTSD. Guidelines for the pharmacological treatment of anxiety disorders, obsessive-compulsive disorder and posttraumatic stress disorder in primary care. Int J Psychiatry Clin Pract. 2012 Jun;16(2):77–84. https://doi.org/10.3109/13651501.2012.667114. PMID: 22540422. http://www.ncbi.nlm.nih.gov/pubmed/22540422 **

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Review

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Case Study

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Use PubMed Clinical Queries to find the most recent evidence. Use this search strategy:

"Anxiety"[Mesh] OR "Anxiety"