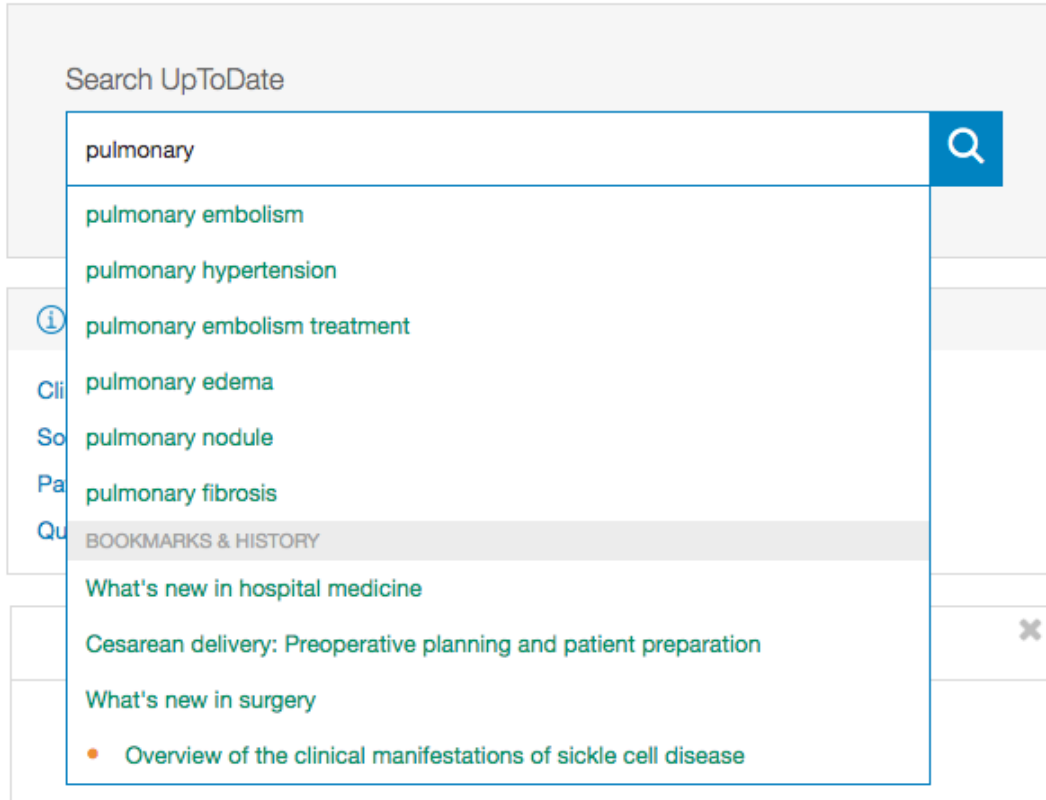


Better Evidence and UpToDate Training Module 2: Personalizing the User Experience

Contents

1. How to Conduct a Search
2. Personalizing the User Experience
3. Topic Navigation and Functionality

How to use the Search Box



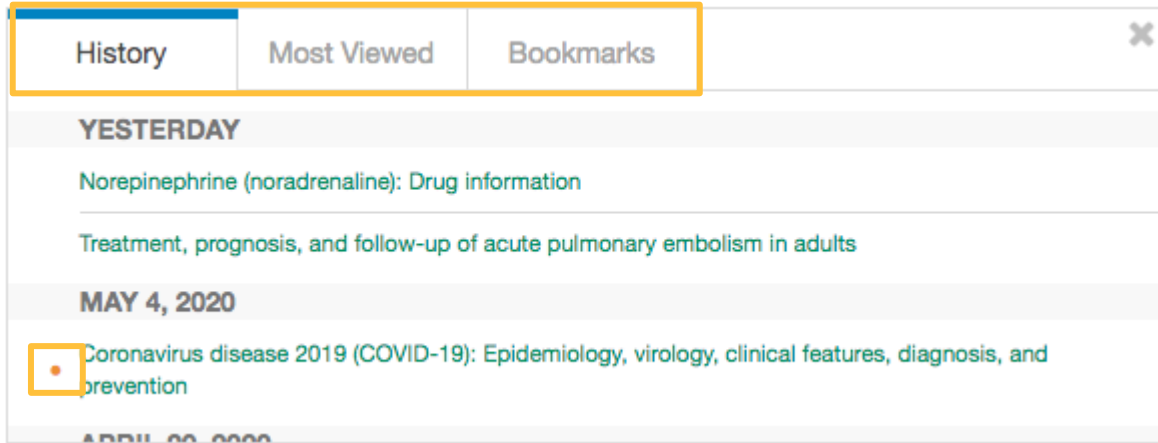
- In the search bar, search by **disease, symptom, lab abnormality, procedure, or drug**
- UpToDate will suggest search terms
- UpToDate also allows for searches in Spanish, French, English, Chinese, Japanese, German, Portuguese, and Italian

UpToDate Search Results Page

The screenshot shows the UpToDate search interface. At the top left is the UpToDate logo. To its right is a search bar containing the text 'pulmonary embolism treatment' and a magnifying glass icon. Below the search bar is a blue navigation bar with the following items: 'Contents' with a dropdown arrow, 'Calculators', and 'Drug Interactions'. Underneath this is a grey bar that reads 'Showing results for **pulmonary embolism treatment**'. Below that is a filter bar with five buttons: 'All' (highlighted with an orange border), 'Adult', 'Pediatric', 'Patient', and 'Graphics'. Below the filter bar is a link that says 'Click related term for pulmonary embolism: [venous thromboembolism](#)'. At the bottom is a search result snippet for 'Treatment, prognosis, and follow-up of acute pulmonary embolism in adults' with a brief description and a link to 'Reperfusion therapy'.

- Topics are displayed by relevance criteria
- To filter a search, select *All*, *Adult*, *Pediatric*, *Patient*, or *Graphics* at the top of the screen under the search bar
 - **Adult:** clinical content relevant to adult patients
 - **Pediatrics:** clinical content relevant to pediatric patients
 - **Patient:** patient-focused resources (i.e. patient education)
 - **Graphics:** over 30,000 graphics available, can be exported directly to PowerPoint

Personalizing the User Experience



- View a **history** of content you have previously read
- Keep track of **updates** to topics you visit most frequently - an **orange dot** next to a topic indicates the topic has been updated since your last viewing
- **Bookmark** UpToDate topics you wish to revisit

Personalizing the User Experience

The screenshot displays the UpToDate website interface. At the top left is the UpToDate logo. On the top right, the user's name "David Treacy" is shown with a dropdown arrow, along with "CME 49.0" and a "Log Out" link. Below the logo is a navigation bar with links for "Contents", "Calculators", "Drug Interactions", and "UpToDate Pathways". The main content area features a search bar labeled "Search UpToDate" with a magnifying glass icon. Below the search bar is a "Bookmarks" widget with tabs for "History", "Most Viewed", and "Bookmarks". The "Bookmarks" tab is active, showing a list of bookmarked articles. The first article is "Evaluation of and initial approach to the adult patient with undifferentiated hypotension and shock", which is highlighted with a mouse cursor. Other articles in the list include "Anaphylaxis: Confirming the diagnosis and determining the cause(s)", "Pathophysiology of anaphylaxis", and "Allergic reactions to local anesthetics". At the bottom of the page, a URL is visible: https://www.uptodate.com/contents/evaluation-of-and-initial-approach-to-the-adult-patient-with-undifferentiated-hypotension-and-shock?source=bookmarks_widget. In the bottom right corner, there is a copyright notice: "© 2019 UpToDate, Inc. and/or its affiliates. All Rights Reserved."

Topic Navigation and Functionality

Topic Outline



SUMMARY AND RECOMMENDATIONS

WHAT'S NEW

INTRODUCTION

INITIAL APPROACH AND RESUSCITATION

Assess hemodynamic stability

- Hemodynamically stable
- Hemodynamically unstable

Initial therapies

- Respiratory support
- Hemodynamic support
- Empiric anticoagulation

Treatment, prognosis, and follow-up of acute pulmonary embolism in adults

Authors: [Victor F Tapson, MD](#), [Aaron S Weinberg, MD, MPhil](#)

Section Editors: [Jess Mandel, MD](#), [Robert S Hockberger, MD, FACEP](#)

Deputy Editor: [Geraldine Finlay, MD](#)

[Contributor Disclosures](#)

All topics are updated as new evidence becomes available and our [peer review process](#) is complete.

Literature review current through: **Mar 2020**. | This topic last updated: **Mar 06, 2020**.

What's New

Clinical impact of pulmonary embolism response teams (December 2019)

Pulmonary embolism response teams (PERT) are being increasingly used, but their clinical impact is u...

[Read more](#) ▾

Topic Navigation and Functionality

[< Back to Search](#)

Topic Outline <

SUMMARY AND RECOMMENDATIONS

WHAT'S NEW

INTRODUCTION

INITIAL APPROACH AND RESUSCITATION

Assess hemodynamic stability

- Hemodynamically stable
- Hemodynamically unstable

- **Topic Outline** – provides a table of contents for the topic; at the bottom, find links to related topics if this search did not yield what you were looking for

What's New

Clinical impact of pulmonary embolism response teams (December 2019)

Pulmonary embolism response teams (PERT) are being increasingly used, but their clinical impact is unknown. In a recent, retrospective study of nearly 770 patients with PE, PERT implementation was associated with a lower 30-day inpatient mortality compared with baseline, particularly in patients with intermediate and high-risk PE (5 versus 10 percent, respectively) [1]. A PERT was also associated with lower rates of major bleeding, shorter time to therapeutic anticoagulation, and decreased use of inferior vena cava filters. We support the use of PERT, especially in patients with intermediate and high-risk PE. (See "[Treatment, prognosis, and follow-up of acute pulmonary embolism in adults](#)", section on "[Hemodynamically unstable](#)".)

Topic Navigation and Functionality

- **Search Bar** – use to search within the topic for specifics (i.e. ‘complications’ or the name of a medication)
- **Bookmark** – click “bookmark” on the top right corner to save the current page

UpToDate®

pulmonary embolism treatment



Menu

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Treatment, prognosis, and follow-up ...

vasopressor

Find

Patient

Share



Bookmark

WHAT'S NEW



INTRODUCTION

INITIAL APPROACH AND RESUSCITATION

Assess hemodynamic stability

- Hemodynamically stable
- Hemodynamically unstable

Initial therapies

- Respiratory support
- Hemodynamic support

INTRODUCTION

Acute pulmonary embolism is a sometimes fatal disease with a highly variable clinical presentation. It is a medical emergency that must be recognized in a timely fashion so that recurrent thromboembolism and death can be prevented [1-5].

The treatment, prognosis, and follow-up of patients with acute PE are reviewed here. The epidemiology, pathophysiology, clinical presentation, and diagnosis of PE, as well as detailed discussions of anticoagulation and thrombolysis in patients with PE are presented separately. (See ["Overview of acute pulmonary embolism in adults"](#) and ["Clinical presentation, evaluation, and diagnosis of the nonpregnant adult with suspected acute pulmonary embolism"](#) and ["Approach to](#)

Find In Topic

1 of 13

Synonym Exact

< >

Done

Topic Navigation and Functionality

- **References and full-text Research Articles** – clicking on an in-text citation brings up the full reference and abstract, which you can then access **through HINARI** to read more about the topic

A femoral IV access line with a “built-in” IVC filter that can be opened when the line is placed and collapsed and removed when the line is removed is being studied for high risk patients who cannot be treated with anticoagulants [88].



Medline ® Abstract for Reference 88 of 'Treatment, prognosis, and follow-up of acute pulmonary embolism in adults'

88 [PubMed](#)

TI Pilot study evaluating the safety of a combined central venous catheter and inferior vena cava filter in critically ill patients at high risk of pulmonary embolism.

AU Cadavid CA, Gil B, Restrepo A, Alvarez S, Echeverry S, Angel LF, Tapson V, Kaufman J

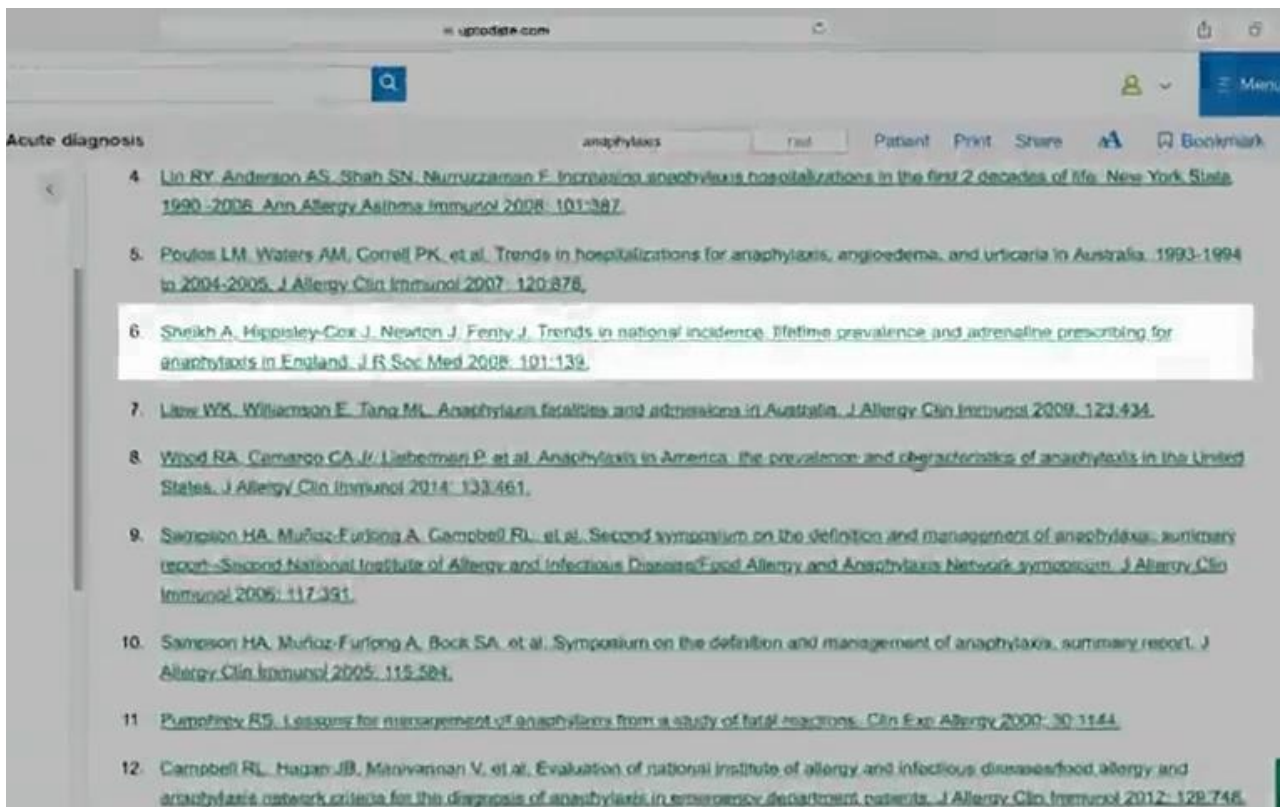
SO J Vasc Interv Radiol. 2013;24(4):581.

The objectives of this pilot trial were to assess the safety of a new device for pulmonary embolism (PE) prophylaxis. The device, the Angel Catheter, was placed in eight patients who were in the intensive care unit and were at high risk of PE. The device was inserted at the bedside without fluoroscopic guidance via a femoral venous approach. All eight devices were inserted and subsequently retrieved without complications (follow-up, 33-36 d). One filter trapped a large clot.

AD Critical Care Department, Hospital Pablo Tobon Uribe, Medellin, Colombia.

PMID [23522160](#)

References and Full-Text Research Articles



Acute diagnosis

anaphylaxis read Patient Print Share A Bookmark

4. [Lin RY, Anderson AS, Shah SN, Nuruzzaman F. Increasing anaphylaxis hospitalizations in the first 2 decades of life, New York State, 1990-2006. *Ann Allergy Asthma Immunol* 2008; 101:387.](#)
5. [Poulos LM, Waters AM, Correll PK, et al. Trends in hospitalizations for anaphylaxis, angioedema, and urticaria in Australia, 1993-1994 to 2004-2005. *J Allergy Clin Immunol* 2007; 120:878.](#)
6. [Sheikh A, Hippisley-Cox J, Newton J, Fenty J. Trends in national incidence, lifetime prevalence and adrenaline prescribing for anaphylaxis in England. *J R Soc Med* 2008; 101:139.](#)
7. [Law WK, Williamson E, Tang ML. Anaphylaxis fatalities and admissions in Australia. *J Allergy Clin Immunol* 2009; 123:434.](#)
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9. [Samelson HA, Muñoz-Furlong A, Campbell RL, et al. Second symposium on the definition and management of anaphylaxis: summary report—Second National Institute of Allergy and Infectious Diseases Food Allergy and Anaphylaxis Network symposium. *J Allergy Clin Immunol* 2006; 117:391.](#)
10. [Samelson HA, Muñoz-Furlong A, Bock SA, et al. Symposium on the definition and management of anaphylaxis, summary report. *J Allergy Clin Immunol* 2005; 115:584.](#)
11. [Pumphrey RS. Lessons for management of anaphylaxis from a study of fatal reactions. *Clin Exp Allergy* 2000; 30:1144.](#)
12. [Campbell RL, Hagan JB, Miravet V, et al. Evaluation of national institute of allergy and infectious diseases food allergy and anaphylaxis network criteria for the diagnosis of anaphylaxis in emergency department patients. *J Allergy Clin Immunol* 2012; 128:746.](#)

Topic Navigation and Functionality

- **Graded Recommendations** - All recommendations are associated with grades that address the strength of the recommendation and the quality of supporting evidence
- For patients with a **low** risk of bleeding and a high clinical suspicion for PE, we suggest empiric anticoagulation rather than waiting until definitive diagnostic tests are completed **(Grade 2C)**. We use a similar approach in those with a moderate or low clinical suspicion for PE in whom the diagnostic evaluation is expected to take longer than four hours and 24 hours, respectively.



Grade 2C recommendation

A Grade 2C recommendation is a very weak recommendation; other alternatives may be equally reasonable.

Explanation:

A Grade 2 recommendation is a weak recommendation. It means "this is our suggestion, but you may want to think about it." It is unlikely that you should follow the suggested approach in all your patients, and you might reasonably choose an alternative approach. For Grade 2 recommendations, benefits and risks may be finely balanced, or the benefits and risks may be uncertain. In deciding whether to follow a Grade 2 recommendation in an individual patient, you may want to think about your patient's values and preferences or about your patient's risk aversion.

Grade C means the evidence comes from observational studies, unsystematic clinical experience, or from randomized, controlled trials with serious flaws. Any estimate of effect is uncertain.

Graded Recommendations

Emergency treatment anaphylaxis Find Patient Print Share AA Bookmarks

SUMMARY AND RECOMMENDATIONS

- Patients with anaphylaxis should be assessed and treated as rapidly as possible, as respiratory or cardiac arrest and death can occur within minutes. Anaphylaxis appears to be most responsive to treatment in its early phases, before shock has developed, based on the observation that delayed [epinephrine](#) injection is associated with fatalities. (See '[Immediate management](#)' above.)
- Initial management is summarized in rapid overview tables for adults ([table 1](#)) and children ([table 2](#)). (See '[Immediate management](#)' above.)
- [Epinephrine](#) is lifesaving in anaphylaxis. It should be injected as early as possible in the episode, in order to prevent progression of symptoms and signs. **There are no absolute contraindications to epinephrine use, and it is the treatment of choice for anaphylaxis of any severity.** We recommend epinephrine for patients with apparently mild symptoms and signs (eg, a few hives and mild wheezing) ([Grade 1B](#)), as well as for patients with moderate-to-severe symptoms and signs ([Grade 1A](#)). (See '[Epinephrine](#)' above.)
- The route of [epinephrine](#) administration depends upon the presenting symptoms. For patients who are **not** profoundly hypotensive or in shock or cardiorespiratory arrest, **intramuscular (IM) injection into the mid-outer thigh** as the initial route of administration is advised, in preference to subcutaneous administration or intravenous (IV) administration ([table 3](#)). (See '[Intramuscular epinephrine injection \(preferred\)](#)' above.)
 - When an exact dose can be drawn up and administered, 0.01 mg/kg (maximum of 0.5 mg) should be administered in the mid-outer thigh every 5 to 15 minutes or more frequently, if necessary.
 - When an autoinjector is used, children weighing less than 25 kg should receive the 0.15 mg dose, and those weighing over 25 kg should receive the 0.3 mg dose administered to the outer thigh every 5 to 15 minutes or more frequently, if necessary. Autoinjector use must be carefully considered in infants and children weighing under 7.5 kg. However, the benefits likely outweigh the risk if this is

Topic Navigation and Functionality

- **Drug Referencing** – clicking on the drug name within the search result brings up that drug's Lexicomp page, which describes dosing, contraindications, drug interactions, etc.
- **Norepinephrine** – Norepinephrine is the most frequently utilized agent in this population because it is effective and less likely to cause tachycardia [16]. Other alternatives include [dopamine](#) and [epinephrine](#), but tachycardia, which can exacerbate hypotension, can occur with these agents [20].



Norepinephrine (noradrenaline): Drug information Lexicomp®

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(For additional information [see "Norepinephrine \(noradrenaline\): Patient drug information"](#) and [see "Norepinephrine \(noradrenaline\): Pediatric drug information"](#))

For abbreviations and symbols that may be used in Lexicomp ([show table](#))



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