



PLICNÍ EMBOLIE a Intervenční kardiolog *Není to omyl?*

*Viktor Kočka, Josef Kroupa za celý PERT tým
Kardiocentrum
Fakultní nemocnice Královské Vinohrady a
3.lékařská fakulta UK v Praze*



Plicní embolie – další na řadě?

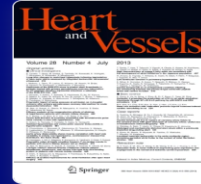


Home > Heart and Vessels > Article

Successful treatment of massive pulmonary embolism with prolonged catheter-directed thrombolysis

CASE REPORT | Published: March 2006

Volume 21, pages 124–126, (2006) [Cite this article](#)



Heart and Vessels

[Aims and scope](#) →

[Submit manuscript](#)

Peter Kelly [✉](#), Niamh Carroll, Cliona Grant, Conor Barrett & Victor Kocka

EuroIntervention 2022; 18:e639-e646. DOI: 10.4244/EIJ-D-

A pilot randomised trial of catheter-directed thrombolysis or standard anticoagulation for patients with intermediate-high risk acute pulmonary embolism

Josef Kroupa^{1*}, MD, PhD; Michal Buk², MD; Jiri Weichet², MD, PhD; Hana Malikova², MD, PhD; Lucie Bartova¹, MSc; Hana Linkova¹, MD, PhD; Oana Ionita¹, MD; Martin Kozel¹, MD, PhD; Zuzana Motovska¹, MD, PhD; Viktor Kocka¹, MD, PhD

EXPERT REVIEW OF CARDIOVASCULAR THERAPY
2023, VOL. 21, NO. 2, 123–132
<https://doi.org/10.1080/14779072.2023.2174101>



REVIEW



The many roles of urgent catheter interventions: from myocardial infarction to acute stroke and pulmonary embolism

Viktor Klancik^{a,b}, Viktor Kočka^{b,c}, Jakub Sulzenko^{b,c} and Petr Widimsky^{b,c}

Touškův den Jihočeského KC 2024



Plicní embolie za 25 let

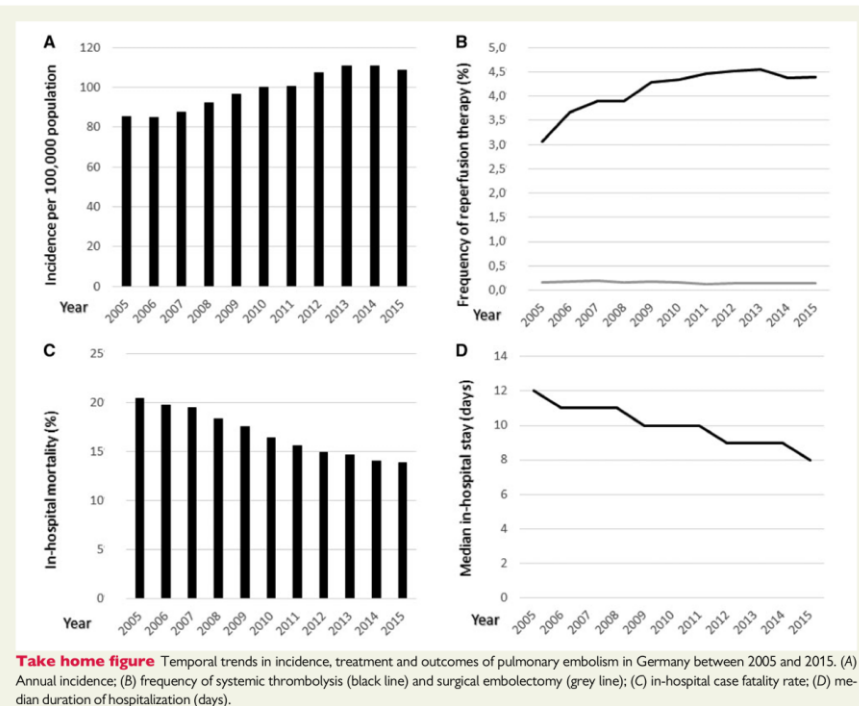
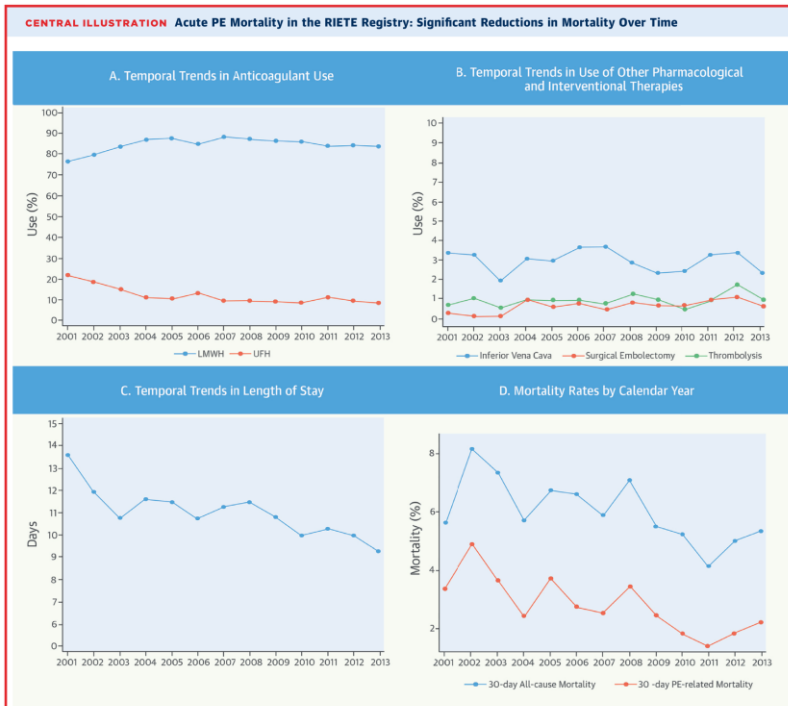
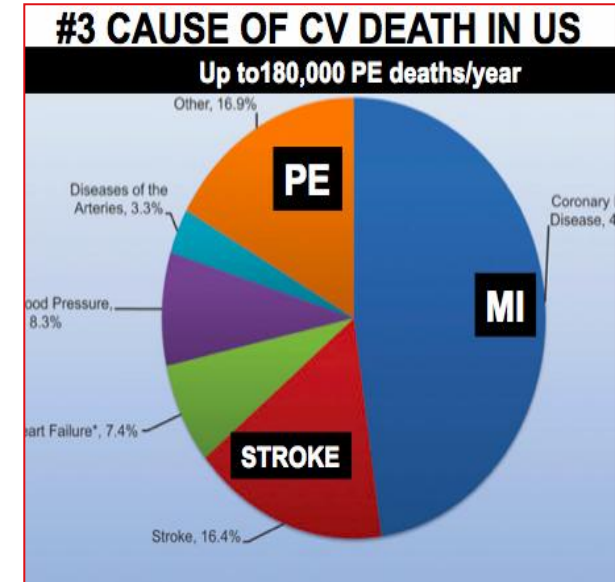


CT AG plicnice...již od 1997 v Jablonci na Nisou

Trombolýza pro pacienty v šoku....již od 1995

Debaty o trombolýze pro méně nemocné pacienty....2001

Německý registr 880 tisíc PE pacientů 2005-15 – pouze 15% pacientů v šoku léčeno systémovou trombolýzou



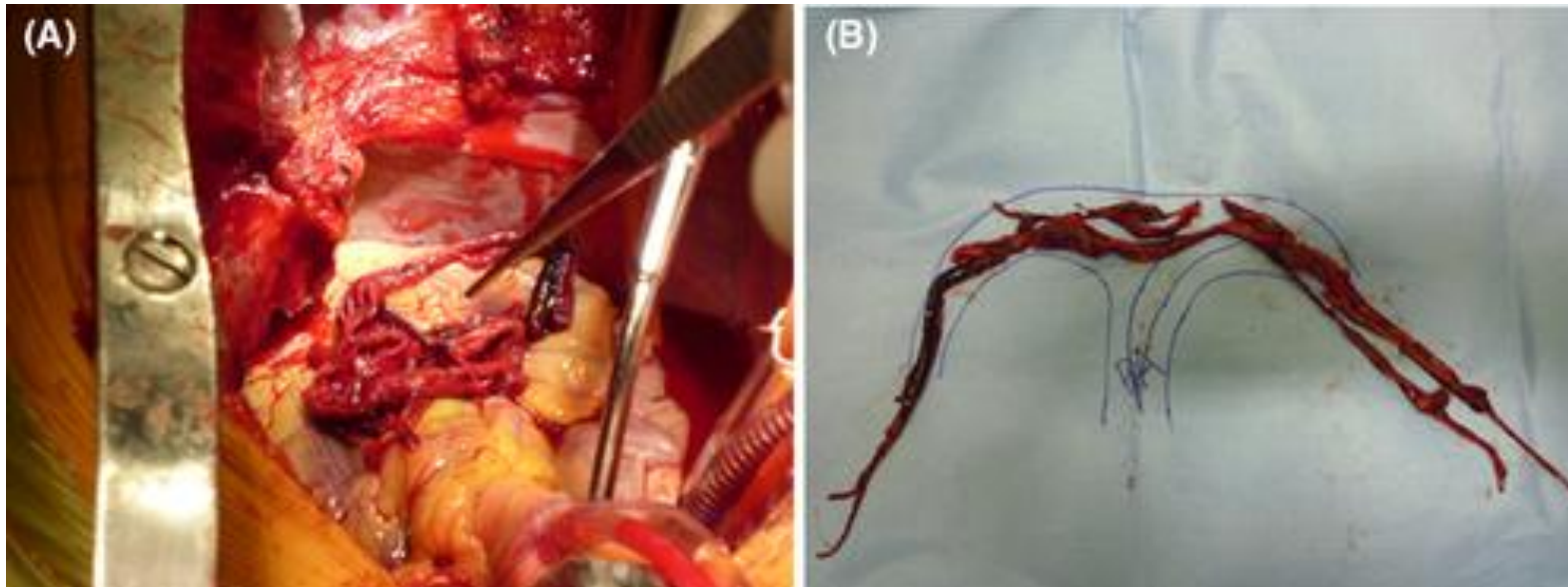
Take home figure Temporal trends in incidence, treatment and outcomes of pulmonary embolism in Germany between 2005 and 2015. (A) Annual incidence; (B) frequency of systemic thrombolysis (black line) and surgical embolectomy (grey line); (C) in-hospital case fatality rate; (D) median duration of hospitalization (days).

European Heart Journal 2020 Jan 21;41(4):522-529.

Jiménez, D. et al. J Am Coll Cardiol. 2016; 67(2):162-70.

Plicní embolectomie pro PE

- Malé serie pacientů či kasuistiky
- Prováděna vzácně, vysoké riziko operace



Tagawa T, Sakuraba S. Acute massive pulmonary embolism treated by urgent pulmonary embolectomy: A case report. *Clin Case Rep.* 2020;8:1502–1505.

Centra excellence – 89% přežití za 1 rok.

Aklog L, Williams CS, Byrne JG, et al, Acute pulmonary embolectomy: a contemporary approach. *Circulation.* 2002; **105**: 1416- 1419.



Katetrizační intervence pro PE



Recommendations for acute-phase treatment of high-risk PE (2)



Recommendations	Class	Level
Percutaneous catheter-directed treatment should be considered for patients with high-risk PE, in whom thrombolysis is contraindicated or has failed.	IIa	C
Norepinephrine and/or dobutamine should be considered in patients with high-risk PE.	IIa	C
ECMO may be considered, in combination with surgical embolectomy or catheter-directed treatment, in patients with PE and refractory circulatory collapse or cardiac arrest.	IIb	C

ECMO = extracorporeal membrane oxygenation.

Recommendations for acute-phase treatment of intermediate- or low-risk PE (3)



Recommendations	Class	Level
Reperfusion treatment		
Rescue thrombolytic therapy is recommended for patients with haemodynamic deterioration on anticoagulation treatment.	I	B
As an alternative to rescue thrombolytic therapy, surgical embolectomy or percutaneous catheter-directed treatment should be considered for patients with haemodynamic deterioration on anticoagulation treatment.	IIa	C
Routine use of primary systemic thrombolysis is not recommended in patients with intermediate- or low-risk PE.	III	B

Závěr

- Možnosti katetrizačních intervencí pro pacienty s PE se rozšiřují
- Lokální trombolýzu pro pacienty s vyšším středním rizikem zkoumá randomizovaná studie PRAGUE 26 – díky
- Agresivnější a snad i účinnější přístupy jsou potřeba pro pacienty v šoku a ve vysokém riziku
- Ve FNKV již vznikl PERT tým!! Již provedeno prvních 10 trombektomií

