VŠE O STUDIÍCH PRAGUE

Petr Widimský

jménem několika set spoluautorů

z několika desítek nemocnic v ČR

Akademické (nikoli firmami sponzorované !),

většinou randomizované studie,

řešící důležité otázky klinické kardiologie

Pár vzpomínek na začátky

Vůz pojízdné koronární jednotky. Snímek: J. KEJDA

MODRÝ ANDĚL

Rozhovor s asistentem MUDr. Josefem Flekem, lékařem KORONÁRNÍ JEDNOTKY interny Vinohradské nemocnice, nechce být víc než informací čtenářům Večerní Prahy. Je ověřeno, že dvě třetiny občanů postižených »náhlou příhodou srdeční« se dostávají do lékařské péče až po čtyřech hodinách. Přihlédne-li se ke skutečnosti, že právě v prvých hodinách po akutní koronární příhodě dochází k největší úmrtnosti pacientů, pak tento statistický údaj bubnuje na poplach.

• Pane doktore, jaký je hlavní úkol pojízdné koronární jednotky?

• Infarkt myokardu se stal strašákem století. Mohl byste vyjádřit tuto frázi v konkrétních číslech?

• To je dost otřesné. Sníží pojízdná koronární jednotka tuto čísla?

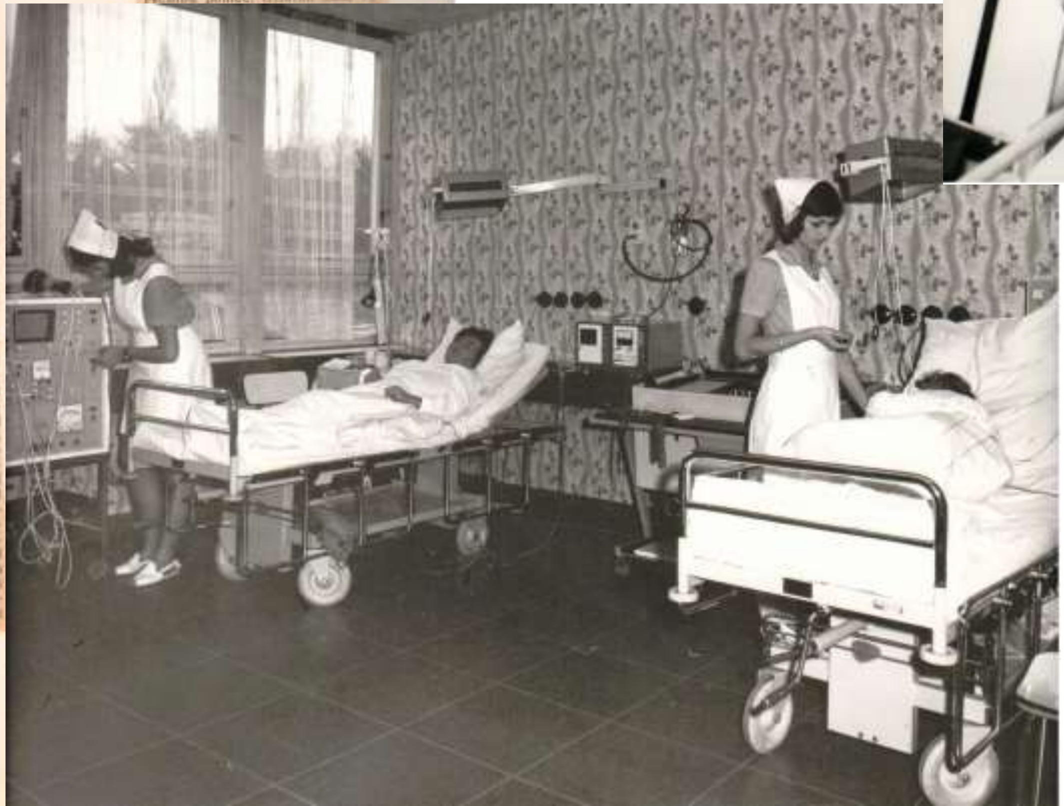
• Je to vlastně závod s časem.

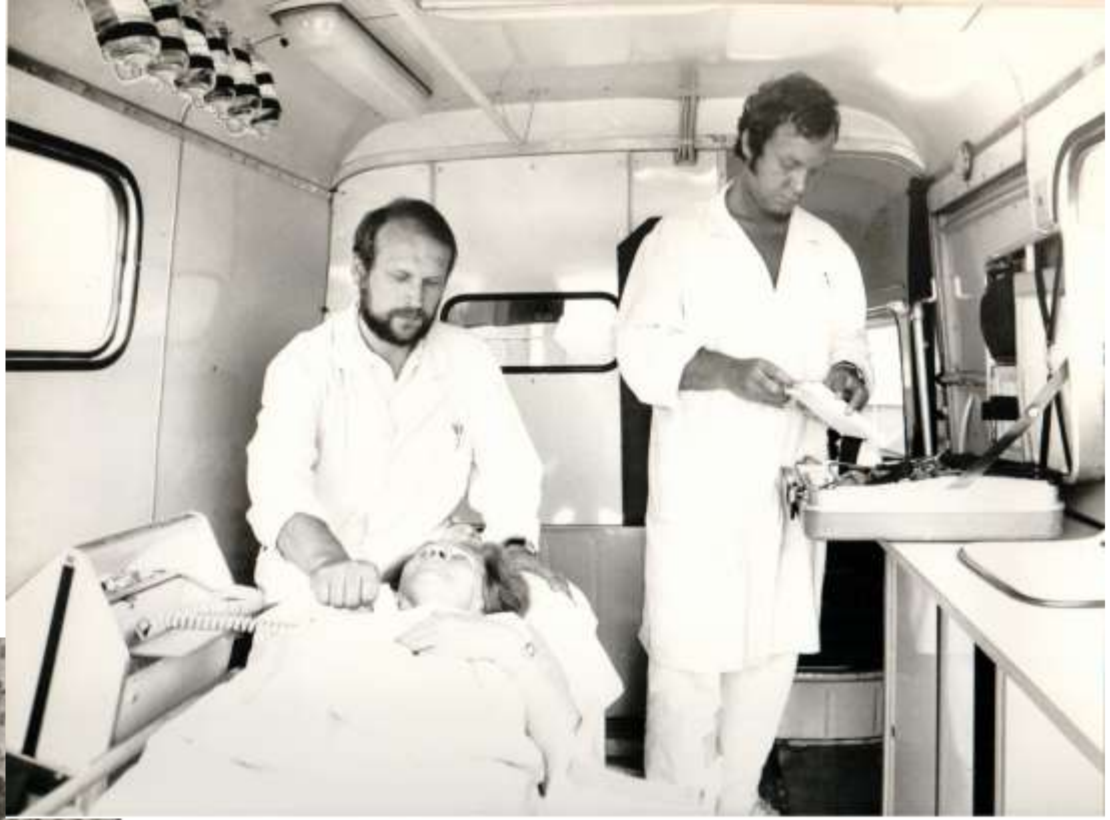
• Pro použití koronární jednotky jsou vymezené určité hodiny?

• Může si ji tedy každý kdykoliv zavolat?

• Nemáte tedy přímou linku, s kterou je seznámena veřejnost?

Čím vám mohou pomoci občané?





1976 - 82

ANOTACE

Čas lék čes 1983; 122: 694-6.

PRVNÍ ZKUŠENOSTI SE SELEKTIVNÍ INTRAKORONÁRNÍ TROMBOLYTICKOU LÉČBOU

V. Červenka, Vl. Víšek, J. Dvořák
P. Gregor, S. Hrdlička, T. Sládková,
P. Widimský

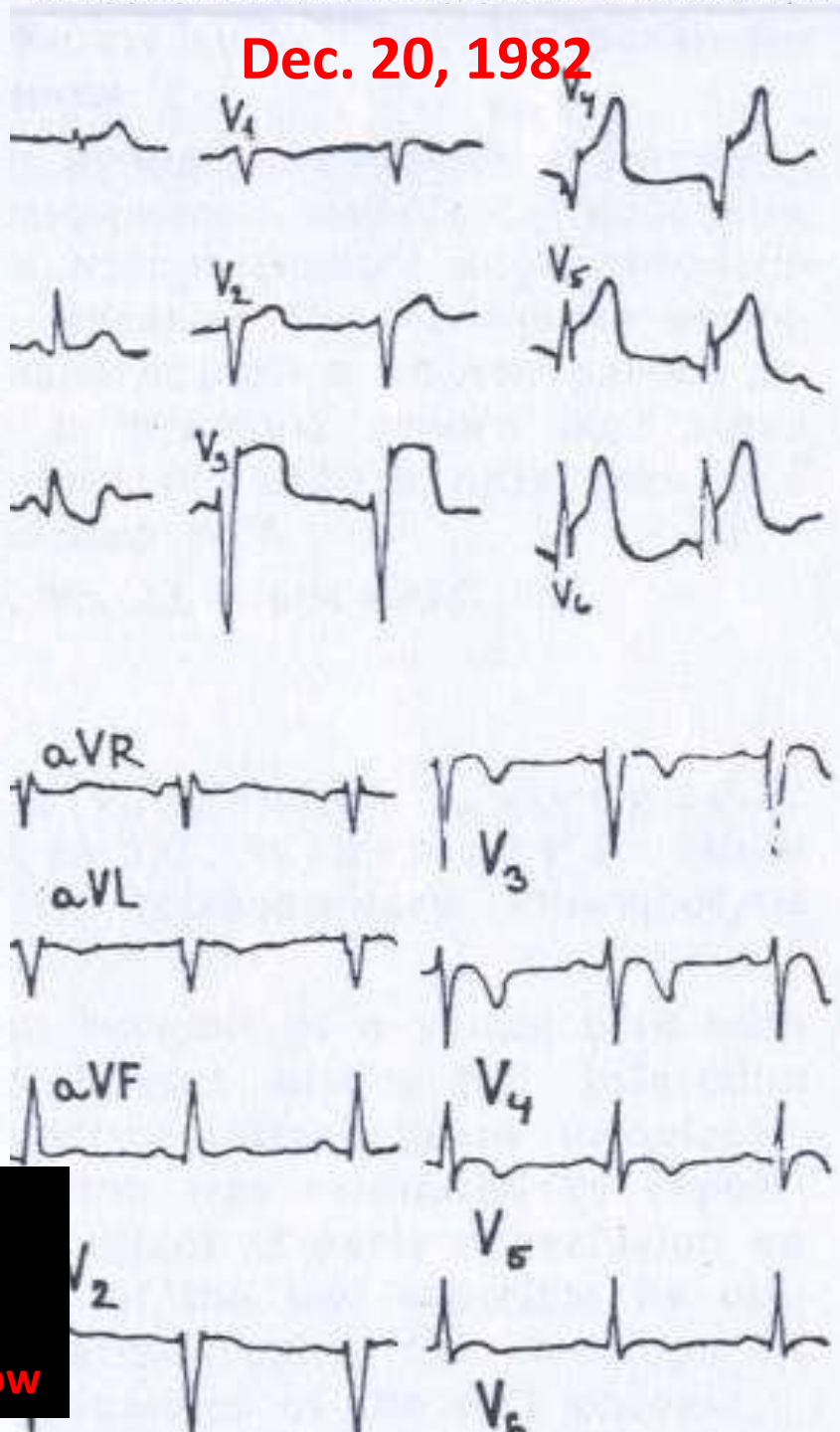
II. interní klinika lékařské fakulty hygienické
University Karlovy, Praha,
přednosta prof. MUDr. V. Víšek, DrSc.

Souhrn

Referováno o případu mladého muže s transmurálním anteroseptolaterálním infarktem myokardu, který byl ošetřen selektivní intrakoronární trombolytickou léčbou. Rekanalizace byla hodnocena opakovanou koronarografií a efekt včasné reperfúze na kinetiku a funkci levé

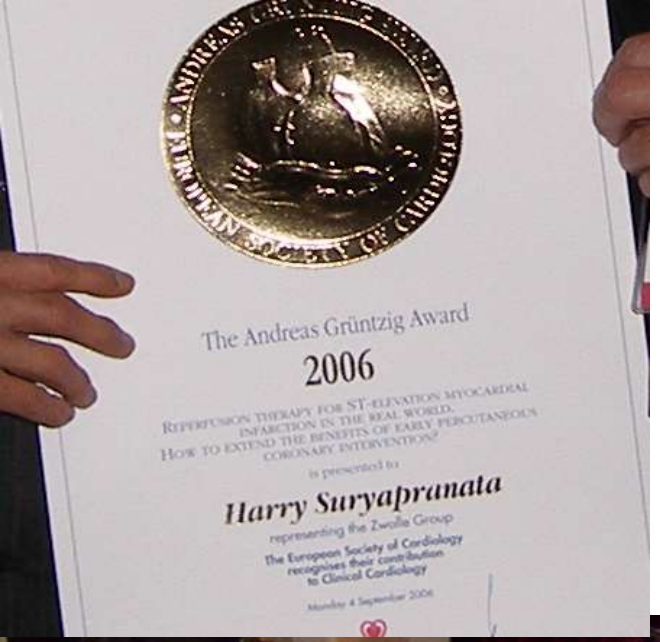
37-years old smoker,
acute LAD occlusion (TIMI 0 flow)
Single-vessel disease
Intracoronary streptokinase infusion – TIMI 3 flow

Dec. 20, 1982



[Edited]: Tran
coronary Thro
Springer Verla
cutaneous tran
approach to a
the potential
J., 101, 1981, č
cacy of percut
tion utilizing s
acute myocard
6, s. 1159—116
rience with pe
lization by stre
acute myocard
peutic approac
ving ventricula
6, s. 1126—113
coronary arte
Myocardial Inf
až 497. — 7. M
veness of intra
myocardial inf
hospital course
č. 6, s. 1181—1
bolyse mit Str
tionärer Verlau
č. 14, s. 98—10

1991 nejdůležitější šálek kávy (katlab Rotterdam – H. Suryapranata)
1993-5 intermitentní pracovní pobyt v Kardiocentru Zwolle (4x3 měsíce)



A COMPARISON OF IMMEDIATE CORONARY ANGIOPLASTY WITH INTRAVENOUS STREPTOKINASE IN ACUTE MYOCARDIAL INFARCTION

FELIX ZIJLSTRA, M.D., PH.D., MENKO JAN DE BOER, M.D., JAN C.A. HOORNTJE, M.D., PH.D., STOFFER REIFFERS, PH.D., JOHAN H.C. REIBER, PH.D., AND HARRY SURYAPRANATA, M.D., PH.D.

Abstract *Background.* Despite the widespread use of intravenous thrombolytic therapy and of immediate percutaneous transluminal coronary angioplasty for the treatment of acute myocardial infarction, randomized compari- s to reperfusion are lacking. prospective, randomized trial ary angioplasty (without previ- ith intravenous streptokinase

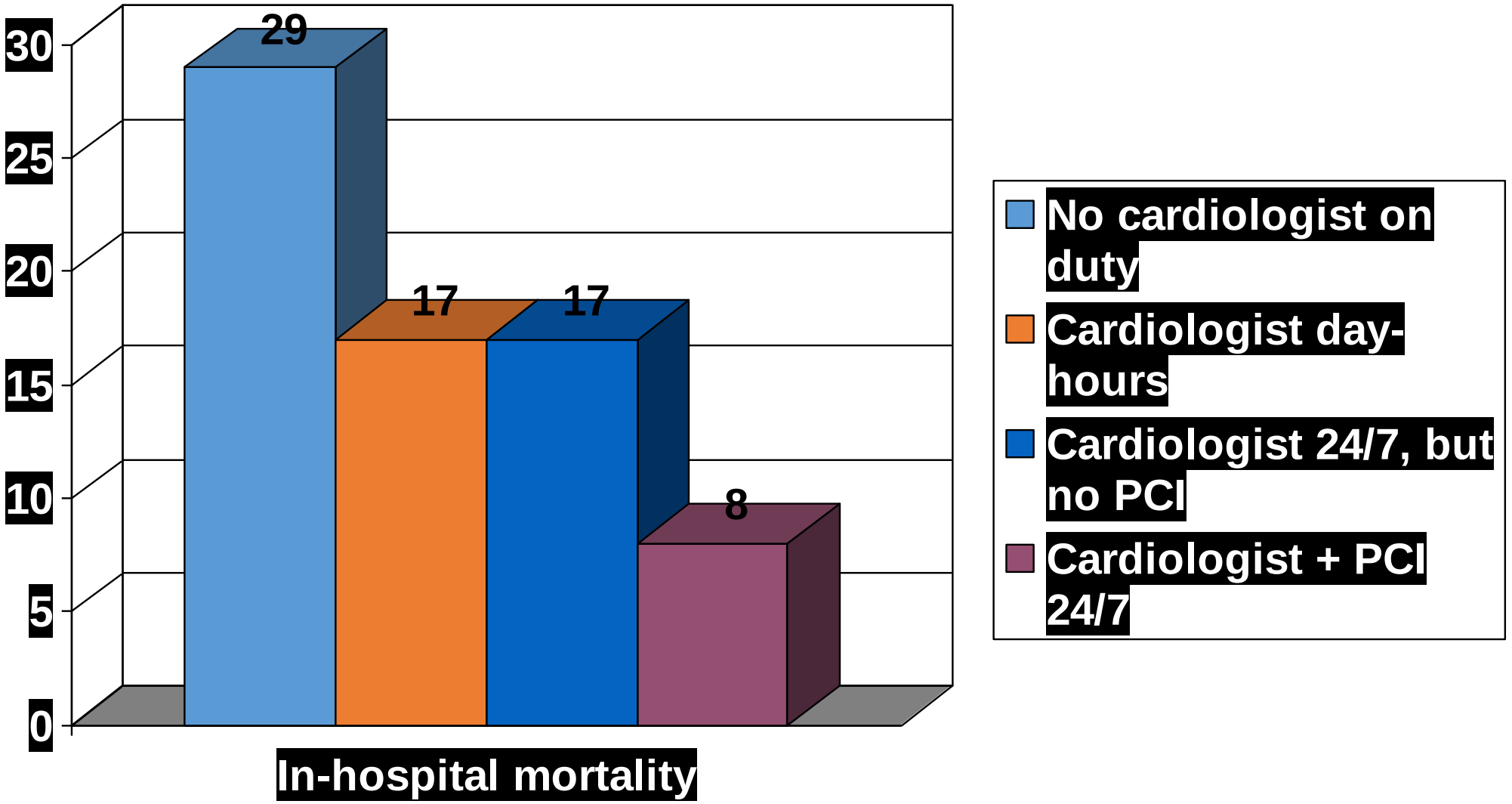
patients with acute myocardial signed to receive one of the ntricular ejection fraction was scanning before hospital dis- nary angiography was per- e of residual stenosis in the

atients were assigned to re- atients to undergo immediate s technically successful in 64 went the procedure. Infarction recurred in nine patients assigned to receive streptokinase, but in none of those assigned to receive angioplasty (P = 0.003). Fourteen patients in the streptokinase group had unstable angina after their infarction, but only four in the angioplasty group (P = 0.02). The mean (ventricular ejection fraction as measured before was 45±12 percent in the streptokinase group ar percent in the angioplasty group (P = 0.004). Th related artery was patent in 68 percent of the p the streptokinase group and 91 percent of tho angioplasty group (P = 0.001). Quantitative cor giography revealed stenosis of 36±20 percent minal diameter in the angioplasty group, as comp 76±19 percent in the streptokinase group (P<0

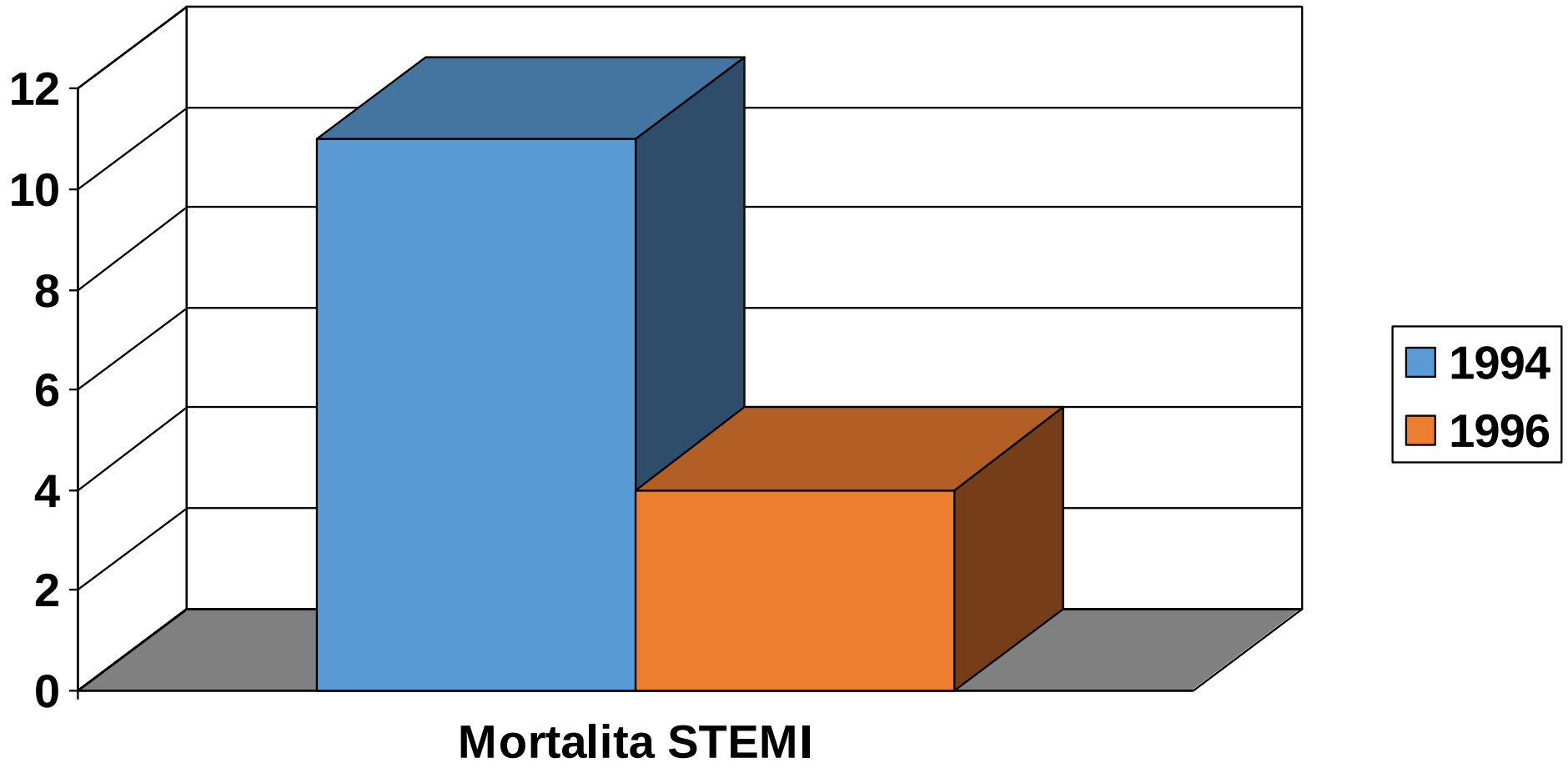
Conclusions. Immediate angioplasty after ac cardial infarction was associated with a higher r tency of the infarct-related artery, a less severe stenotic lesion, better left ventricular function, recurrent myocardial ischemia and infarction tha travenous streptokinase. (N Engl J Med 1993;32

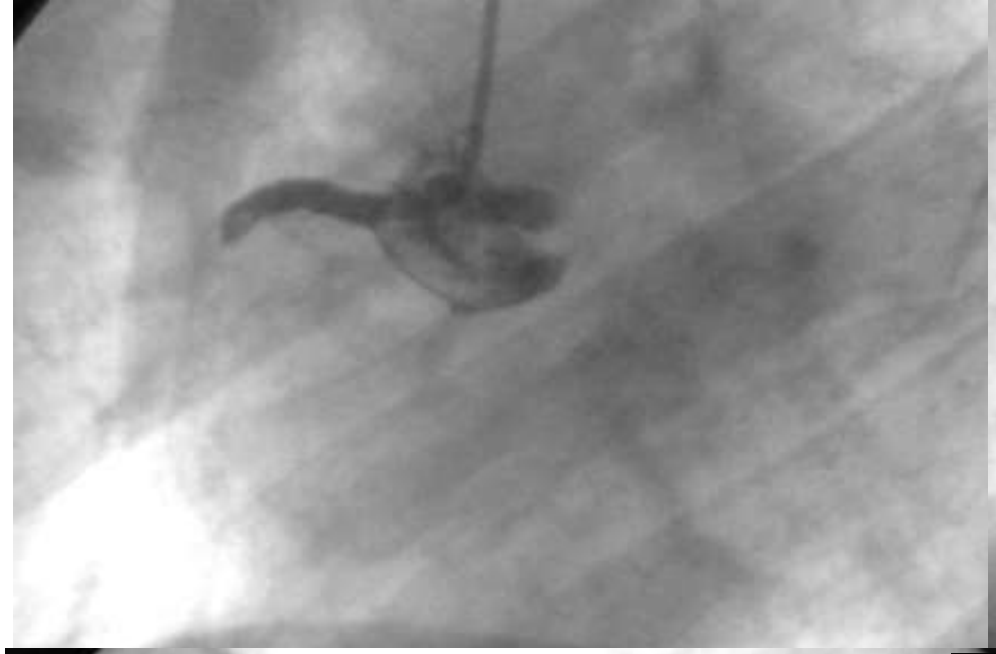
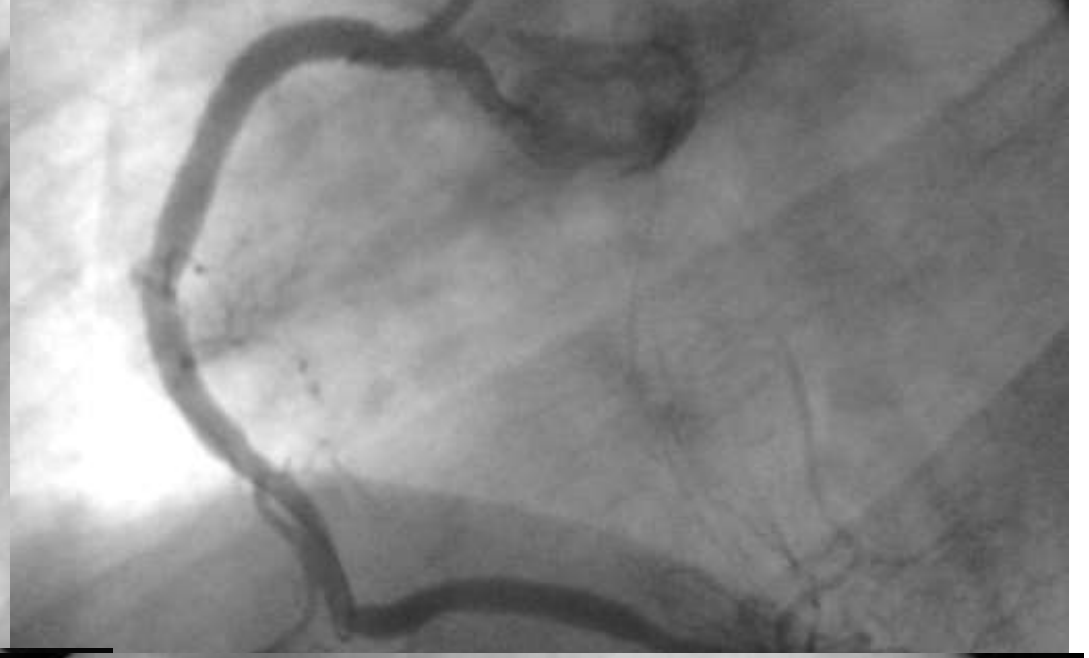
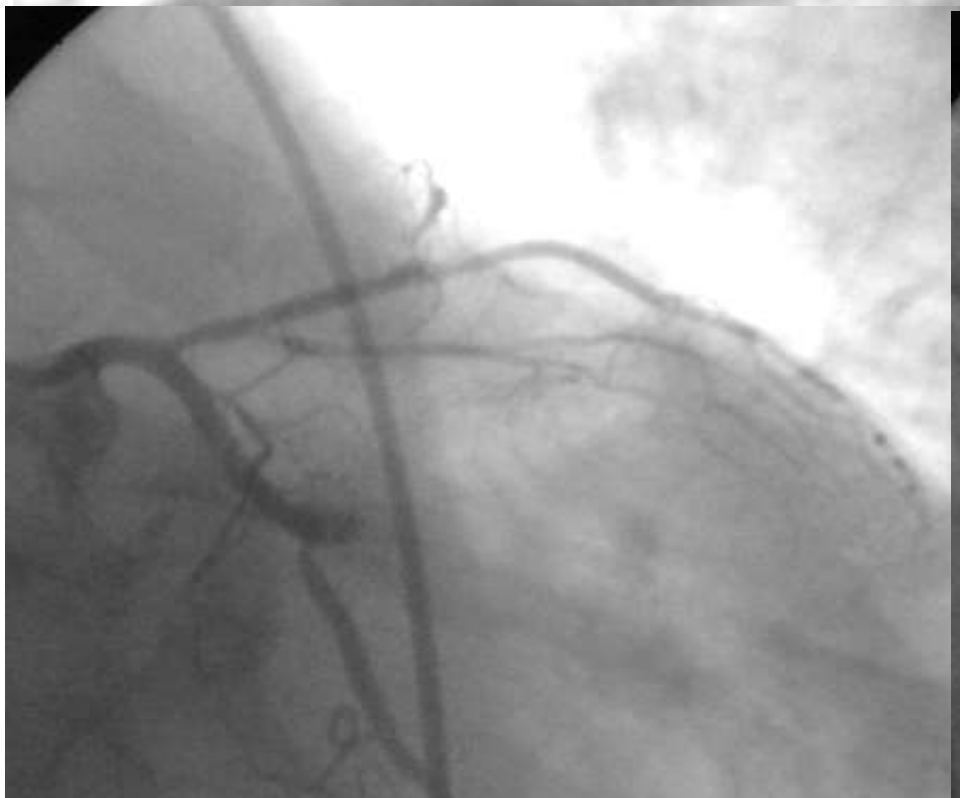
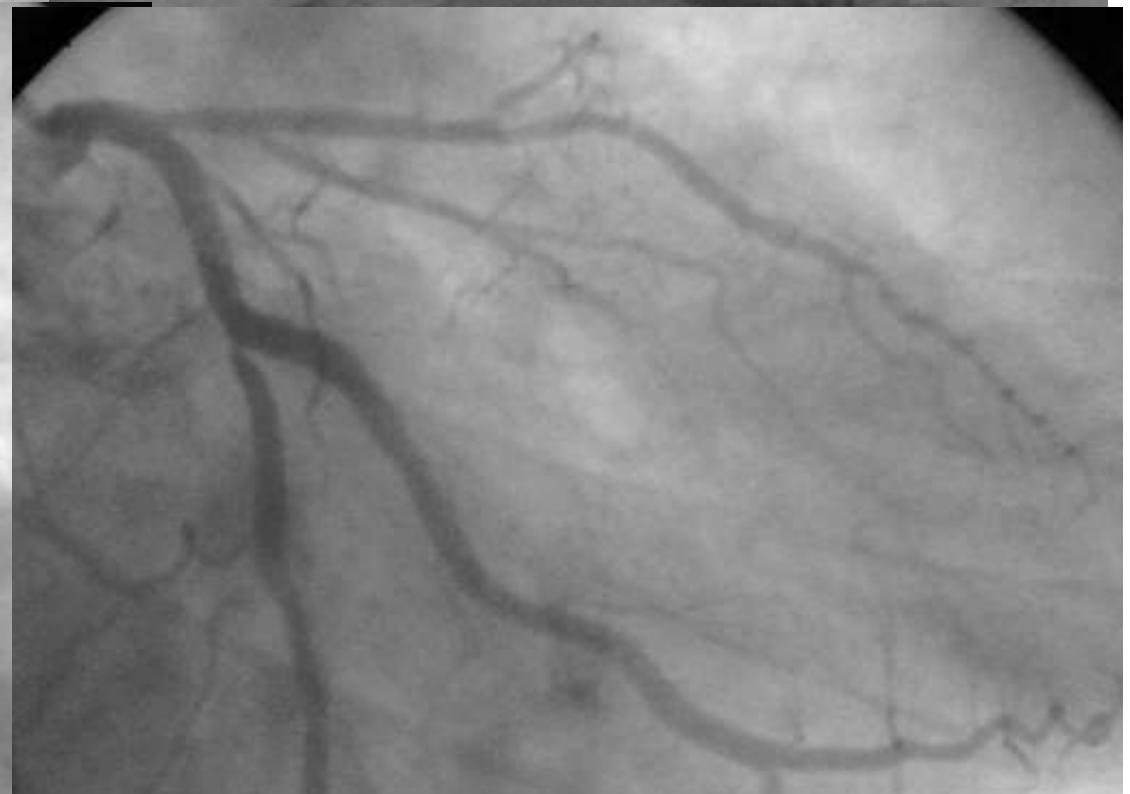
Dobrá parta a enthusiasmus

Práce studentů 3.LF UK v r. 1995:
Reálná úmrtnost na STEMI v různých typech nemocnic (n=11)



Jak změna léčebné strategie AIM snížila úmrtnost ve FNKV: 5.10.1995 jako první pracoviště v ČR a možná i na světě jsme zakázali používání trombolýzy u AIM – 100% pacientů léčeno p-PCI



Přehled všech studií
PRAGUE

Acronym	Topic (question)	First presentation	Main publication
PRAGUE	STEMI: interhospital transport for prim. PCI vs. thrombolysis in the nearest hospital vs. facilitated PCI after interhospital transfer	ESC 1999 Barcelona: Hot Line Clinical Trials	Eur Heart J 2000
VINO*	Non-STEMI: prim. PCI vs. standard care	ESC 2000 Amsterdam Hot Line Clinical Trials	Eur Heart J 2002
PRAGUE-2	STEMI: interhospital transport for prim. PCI vs. thrombolysis in the nearest hospital	ESC 2002 Berlín Hot Line Clinical Trials TCT 2002 Washington Late Breaking Clinical Trials ESC/WCC 2006 Barcelona: sekce Clinical Trials Update	Eur Heart J 2003 Eur Heart J 2007
PRAGUE-3	Late presenters with STEMI: prim. PCI vs. conservative treatment	Study stopped after 44 patients due to slow recruitment	Not published
PRAGUE-4	Off-pump CABG vs. classical on-pump CABG	ESC 2002 Berlín Hot Line Clinical Trials ACC 2004 Late Breaking Clinical Trials	Circulation 2004 Ann Thorac Surg 2004
PRAGUE-5	Early (24 h) discharge after uncomplicated STEMI treated by prim. PCI	ESC 2007 Vienna: poster	Int Heart J 2008
PRAGUE-6	Off-pump CABG vs. classical on-pump CABG in high-risk patients	ACC 2013 San Francisco Late Breaking Clinical Trials	Biomed Pap Med Fac Univ Palacky Olomouc 2016
PRAGUE-7	Abciximab in cardiogenic shock	ESC 2009 Barcelona Hot Line Clinical Trials	Acute Cardiac Care 2011
PRAGUE-8	Clopidogrel pretreatment before elective CAG (± PCI)	ESC 2007 Vienna Hot Line Clinical Trials	Eur Heart J 2008
PRAGUE-9	Ischemic mitral regurgitation: CABG + valvuloplasty vs. PCI alone (no valve intervention)	Prematurely stopped for slow recruitment	Not published
PRAGUE-10	Trimetazidin in heart failure	Study planned, but not realized	Not published
PRAGUE-11	Platelet activity during CABG	ESC 2007	J Thorac Cardiovasc Surg 2008
PRAGUE-12	CABG or valve surgery plus MAZE vs. surgery without MAZE in pts with atrial fibrillation and other indication for cardiac surgery	ESC 2012 Vienna Hot Line Clinical Trials	Eur Heart J 2012
PRAGUE-13	How to treat multivessel disease in STEMI	EuroPCR 2015 Paris Hot Line Clinical Trials	Not published (P.I. Dr. Hlinomaz from Brno).
PRAGUE-14	Perioperative bleeding vs. perioperative ischemia during non-cardiac surgery in cardiac patients	ESC 2013 Amsterdam Hot Line Clinical Trials	Nether Heart J 2014
PRAGUE-15	Renal denervation vs. pharmakotherapy in resistent hypertension	ESH 2014 Athens Hot Line Clinical Trials	Hypertension 2015
PRAGUE-16	Direct catheter thrombektomy in acute ischemic stroke	EuroPCR 2014 Paris Hot Line Clinical Trials ESC 2016 Rome Registry Hot Line	EuroIntervention 2014 J Am Coll Cardiol 2015

PRAGUE-17	**Percutaneous LAA closure vs. NOACs in atrial fibrillation**	**Study will be closed in 2019 and submitted for ESC or AHA**	**Expected late 2019**
PRAGUE-18	Prasugrel vs. ticagrelor before emergent PCI for AMI	ESC 2016 Rome Hot Line Clinical trials	Circulation 2016 J Am Coll Cardiol 2018
PRAGUE-19	Biodegradable stents (Absorb) during prim. PCI for STEMI	EuroPCR 2013 Paris Hot Line Clinical Trials	Eur Heart J 2014 Circulation Interventions 2015
PRAGUE-20	Role of potassium and alcohol in atrial fibrillation	Study started in 2015	
PRAGUE-21	Hybrid (cardiac surgery + electrophysiology) treatment of atrial fibrillation	Study started in 2014	
PRAGUE-22	Bioresorbable stens	Study started in 2017	
PRAGUE-23	Cangrelor in cardiogenic shock	Study started in 2018	

PRAGUE (-1)

Zápis ze zasedání předsednictva Vědecké rady MZ ČR dne 4. listopadu 1997

Přítomni: dle prezenční listiny

Program:

1. Zahájení
2. Kontrola minulého zápisu
3. Informace OK-01 o projektu 4664-3 „Studie Prague“

Ad 3)

Prof. Höschl přivítal přizvané hosty: prof. Čerbáka, doc. Widimského a JUDr. Stolínovou. Základní informaci podal předseda OK 01 dr. Stejskal. Jedná se o projekt č. 4664-3 „Studie Prague“ navrhovatele Doc. MUDr. Petra Widimského, DrSc. Projekt byl projednáván v komisi 01 a jako právně sporný a neetický postoupen k projednání Vědecké radě MZ ČR za účasti prof. Čerbáka (předsedy Kardiologické společnosti a garanta projektu) a Dr. Neuwirta. Místo Dr. Neuwirta se Projekt oponovali 3 oponenti, vyjádření etické komise přiloženo. 2 oponenti prohlásili projekt za vynikající, 1 oponent měl vážné výhrady. Komise 01 jednomyslně uzavřela, že jde vědecky o projekt hodnotný a dobrý, ale jako právně sporný a neetický ho zamítla k udělení grantu IGA.

OK 01 Kardiovaskulární choroby - informoval dr. Stejskal

Jediným problémem je projekt doc. Widimského „Studie Prague“. Přestože hodnocení komise bylo 4, shodla se komise grant nedoporučit. OK 01 žádala VR o stanovisko k zastavení studie.

Hlasování PVR: nedoporučit a potvrdit tak návrh komise 5, doporučit 1, zdrželo se 6.

Vážený pane docente,

Interní grantová agentura Ministerstva zdravotnictví ČR nám v těchto dnech oznámila, které granty uspěly v soutěži o grant IGA na rok 1997.

Současně nám byl předán 1 seznam projektů na řešení témat vypisovaných k 30.4.1997, kterým grant nebyl udělen.

Tyto granty byly zařazeny do následujících kategorií :

0 – projekt nebyl předložen ve stanoveném termínu
3 – dobrý projekt určený k financování pouze pokud zbudou fin.
4 – nevyhovující projekt.

Váš projekt byl zařazen do kategorie : 4.

Důvody redukční – viz zadní strana tohoto sdělení.

Appendix

The complete list of investigators

PTCA centers

Cardiocenter, University Hospital Vinohrady, Prague: Petr Widimský, MD, PhD (principal investigator of the study), Jaroslav Dvořák, MD, František Bednář, MD, Jiří Krupička, MD, Tomáš Buděšínský, MD, Libor Lisa, MD, Zbyněk Straka, MD, PhD.

Cardiovascular Department I, University Hospital St. Anne, Brno: Ladislav Groch, MD, Ivan Horňáček, MD, Ota Hlinomaz, MD, Marek Richter, MD.

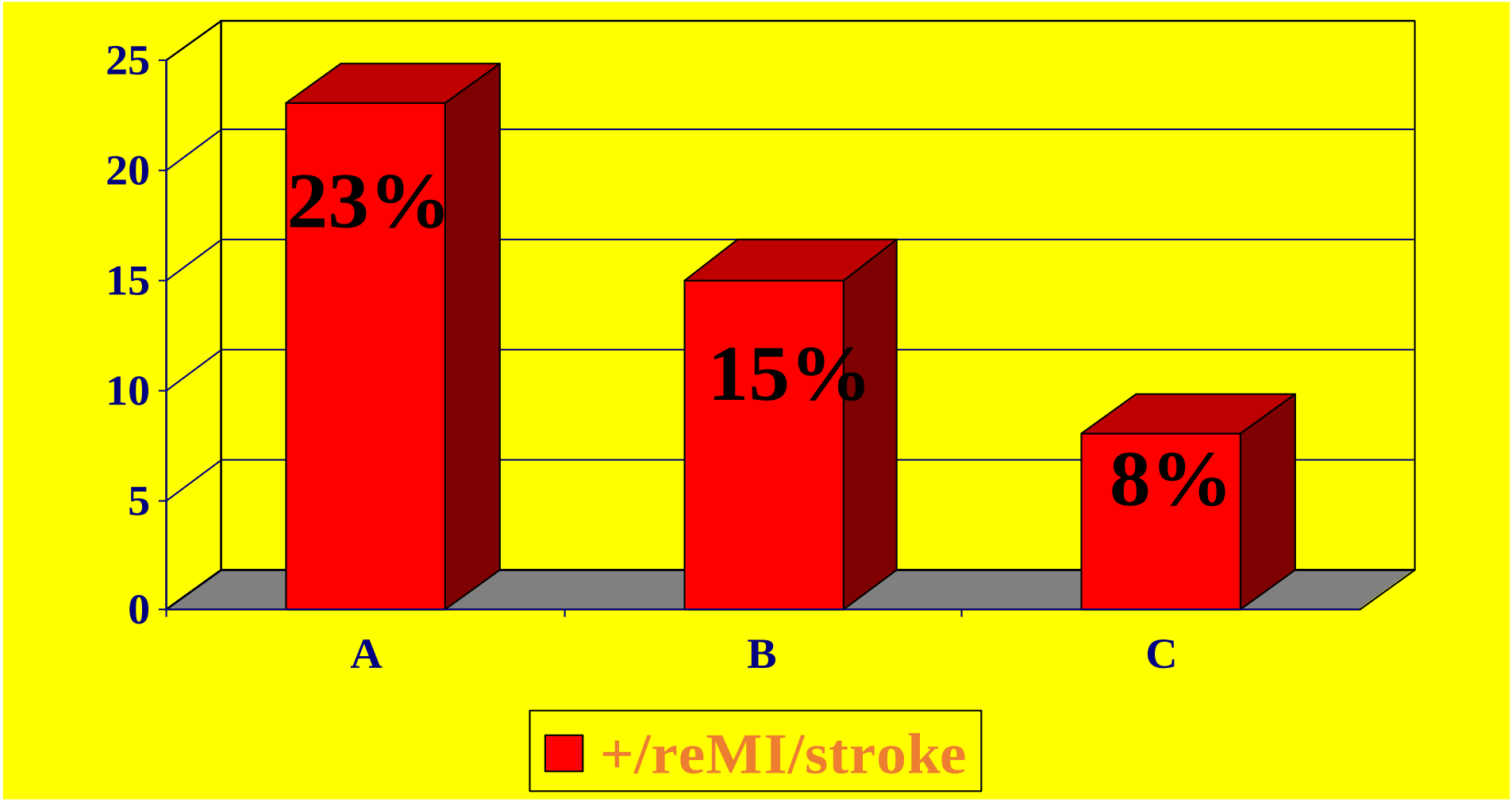
Cardiology Clinic IKEM, Prague: Michael Želízko, MD, Bronislav Janek, MD, Petr Lupínek, MD, Jan Horák, MD, PhD, Jiří Kettner, MD, PhD.

Medical Department II, General University Hospital, Prague: Michael Aschermann, MD, PhD, Stanislav Šimek, MD, Jan Vojáček, MD, PhD.

Community hospitals (all investigators are MDs)

Pavel Třeštík, Bedřich Januška, Lumír Francek (*Kroměříž*), Jiří Povolný, Petr Povolný (*Kladno*), Arnošt Václavíček, David Vencour, Michal Hudcovic (*Nymburk*), Miroslav Čech (*Ivančice*), Miroslava Patočková (*Kolíště*), Gabriel Marcínek, Ondřej Čermák (*Slaný*), Jiří Hrnčíř (*Milosrdných bratří*), Eva Kosová (*Vysočany*), Karel Peterka (*Střešovice*), Venuše Šmejkalová (*Kutná Hora*), Ivo Jokl (*Na Františku*), Tomáš Parák (*Hustopeče*), Jaroslav Vykouřil (*Tišnov*), Tomáš Brabec (*Vojenská nemocnice Brno*), Radovan Sís (*Nový Lískovec*), Jiří Vraný (*Oblouková*).

Prezentace studie PRAGUE (-1) v Hot Lines ESC 1999 v Barceloně



European Heart Journal (2000) **21**, 823–831
doi:10.1053/euhj.1999.1993, available online at http://www.idealibrary.com on IDEAL®

Multicentre randomized trial comparing transport to primary angioplasty vs immediate thrombolysis vs combined strategy for patients with acute myocardial infarction presenting to a community hospital without a catheterization laboratory

The PRAGUE Study

P. Widimský[1], L. Groch[1], M. Želízko[1], M. Aschermann[1], F. Bednář[1] and H. Suryapranata[2] on behalf of the PRAGUE Study Group Investigators*

[1]*Cardiocenter, University Hospital, Vinohrady, Prague, Czech Republic;* [2]*Hospital De Weezenlanden, Zwolle, The Netherlands*

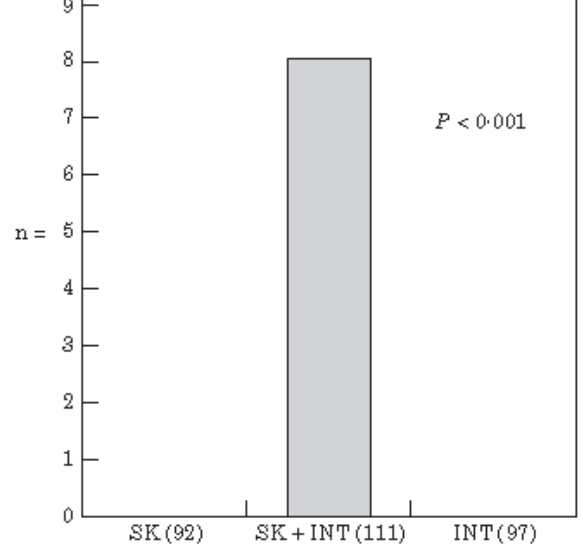


Figure 4 Fatal bleeding complications and/or fatal cardiac tamponade related to actual treatment used. SK=streptokinase without any intervention (92 patients, i.e. group A minus 7 rescue PTCA patients). SK+INT=streptokinase plus intervention (111 patients, i.e. 100 group B patients including those undergoing only coronary angiography, plus 7 rescue angioplasty patients from group A, plus 4 group C patients who also received streptokinase for various reasons). INT=intervention without streptokinase (97 group C patients).

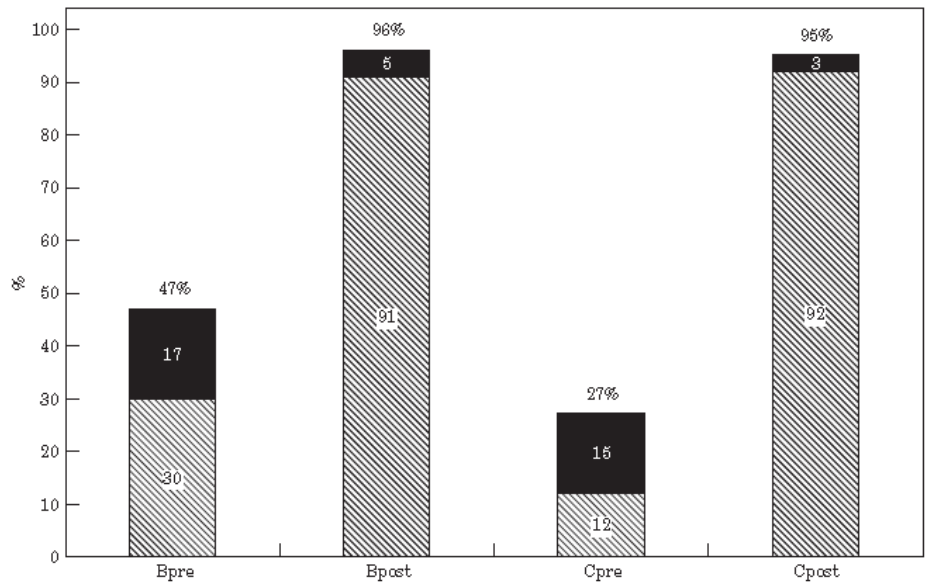


Figure 2 TIMI flow in groups B and C before and after PTCA. Expressed as % of patients with TIMI flow 3 (▨) and TIMI flow 2 (■). Bpre=group B before PTCA, Bpost=group B after PTCA, Cpre=C before, Cpost=C after.

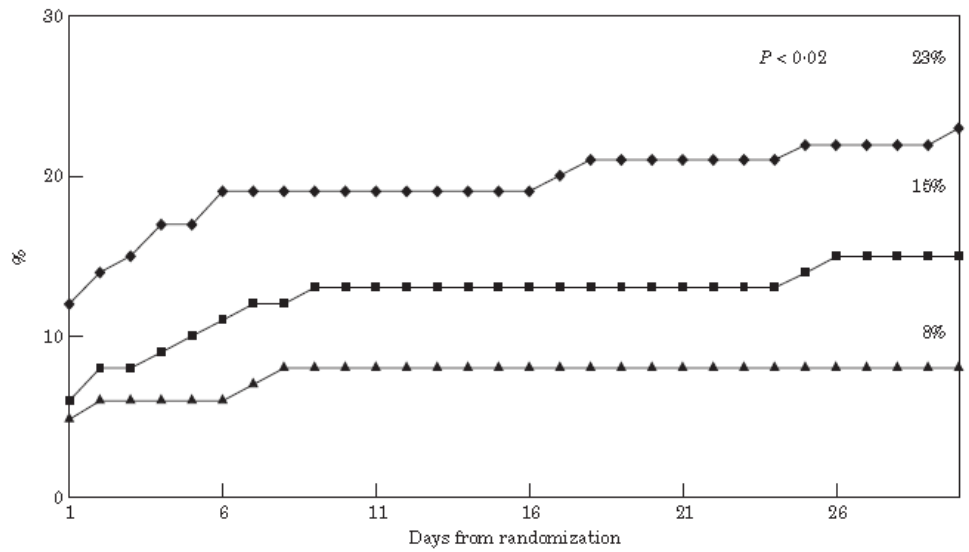


Figure 3 Primary end-point (death/reinfarction/stroke) at 30 days. ◆=group A; ■=group B; ▲=group C.

VINO

European Heart Journal (2002) **23**, 230–238
doi:10.1053/euhj.2001.2735, available online at http://www.idealibrary.com on IDEAL®

Value of First Day Angiography/Angioplasty In Evolving Non-ST Segment Elevation Myocardial Infarction: An Open Multicenter Randomized Trial

The VINO Study

R. Špaček, P. Widimský, Z. Straka, E. Jirešová, J. Dvořák, R. Polášek, I. Karel, R. Jirmář, L. Lisa, T. Buděšínský, F. Málek and P. Stanka

Cardiocenter, University Hospital Královské Vinohrady, 3rd Medical School of Charles University Prague, Prague, Czech Republic

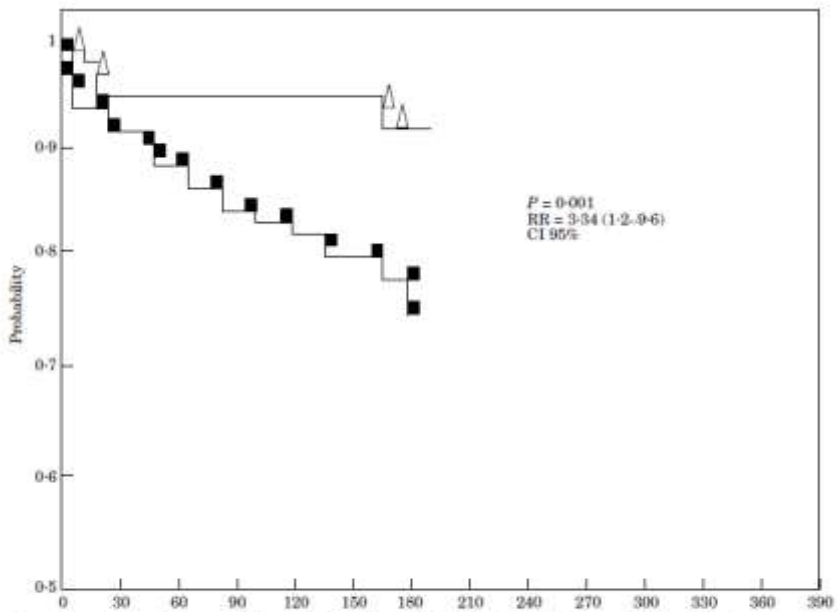


Figure 2 Kaplan–Meier survival analysis of the probability of event-free survival (mortality or non-fatal myocardial infarction) according to the treatment strategy during the 6 months of follow-up. △ = invasive; ■ = conservative.

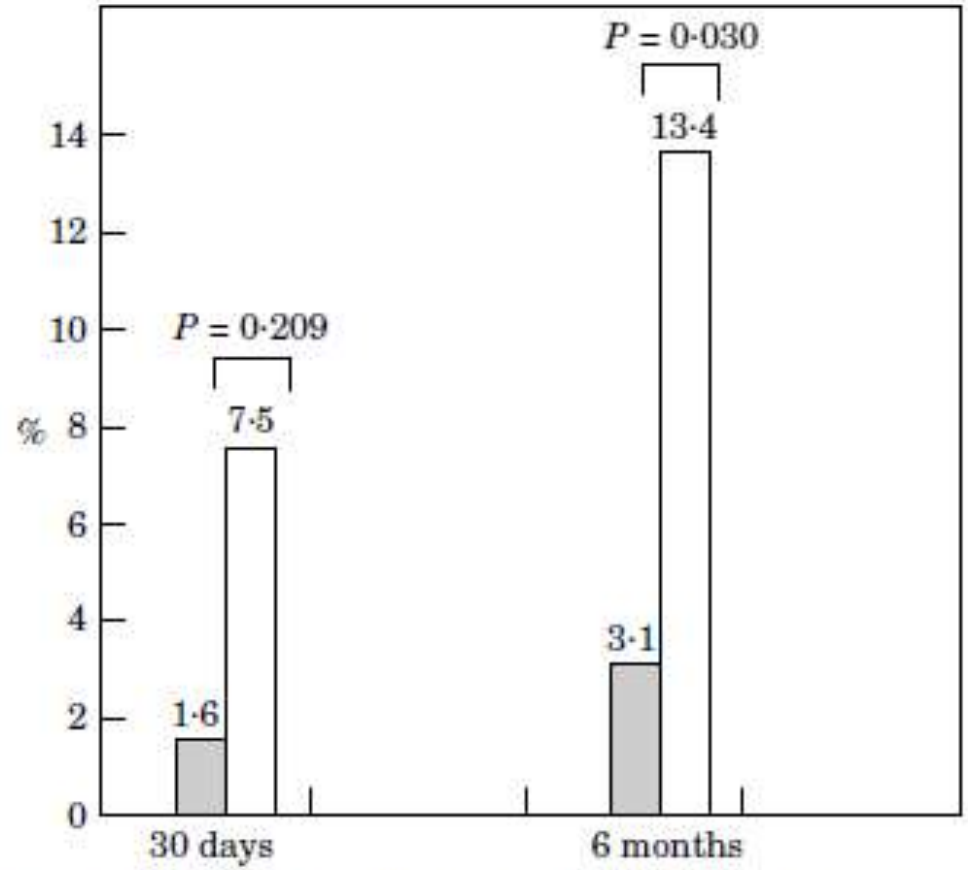


Figure 1 Comparison of the mortality in groups of patients randomly assigned to the early invasive (□) and conservative (□) treatment strategy.

PRAGUE - 2

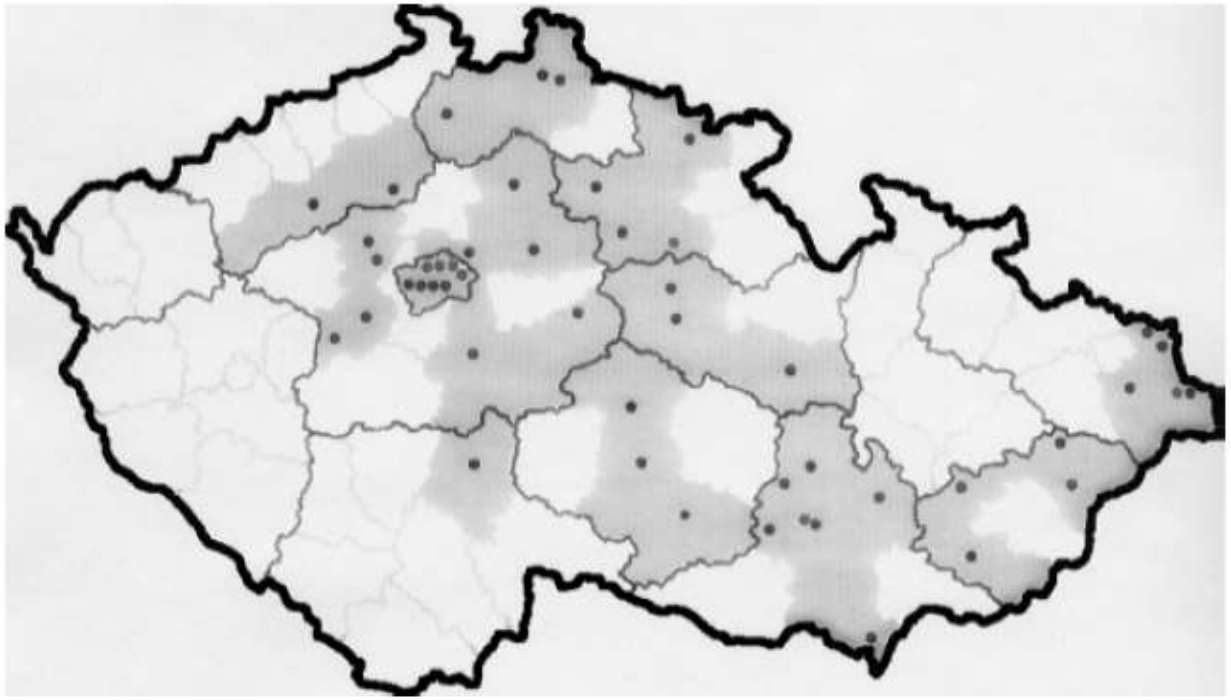


Figure 1 The map of the Czech Republic showing the geographic distribution of primary (community) hospitals/ tertiary cardiac centres (black points) along with their respective service areas-districts (grey). Thirty-three out of 77 districts (geographically 43% of the Czech districts) were participating in the study. The population of these districts however represents 5.7 million, i.e. 54% of the total country population. The situation in the country improved substantially during the study period. Thus, in 2002 additional 9 PCI centres were either newly opened or started 24-h service for primary PCI in acute myocardial infarction. Thus, at the end of study period, 95% of the Czech population had access to primary PCI at a distance <100 km from their homes.

Appendix

The complete list of investigators

PCI centres (number of patients randomized to the PCI group in the respective cooperating primary community hospitals): Investigators

Cardiocenter, University Hospital Vinohrady, Prague (110 patients): Petr Widimský, MD., DrSc., FESC., *(principal investigator of the study)*. Tomáš Buděšínský, MD., *David Voráč, MD. (Junior research coordinator of the study)*, Jaroslav Dvořák, MD., Jiří Krupička, MD., Libor Lisa, MD, Radovan Jirmář, MD., Pavel Gregor, MD., DrSc., FESC., Rudolf Špaček, MD., PhD, Zbynek Straka, MD, PhD.

Cardiovascular Department I, University Hospital St. Anne, Brno (147 patients): Ladislav Groch, MD., Ivan Horňáček, MD., Ota Hlinomaz, MD., Jan Sitar, MD., Libor Nechvátal, MD.

Cardiocenter, Hospital Podlesí, Třinec (72 patients): Marian Branny, MD., Igor Nykl, MD., Ivo Varvařovský, MD., Jindřich Černý, MD., Marek Richter, MD.

Cardiology Clinic IKEM, Prague (45 patients): Michal Želízko, MD., PhD., Bronislav Janek, MD., PhD., Jiří Kettner, MD., PhD., Vladimír Karmazín, MD.

Cardiocenter, University Hospital Hradec Králové (35 patients): Josef Šťásek, MD., Pavel Červinka, MD., Dušan Černohorský, MD., Miroslav Brtko, MD., Vladimír Rozsíval MD., PhD., Aleš Herman, MD., PhD.

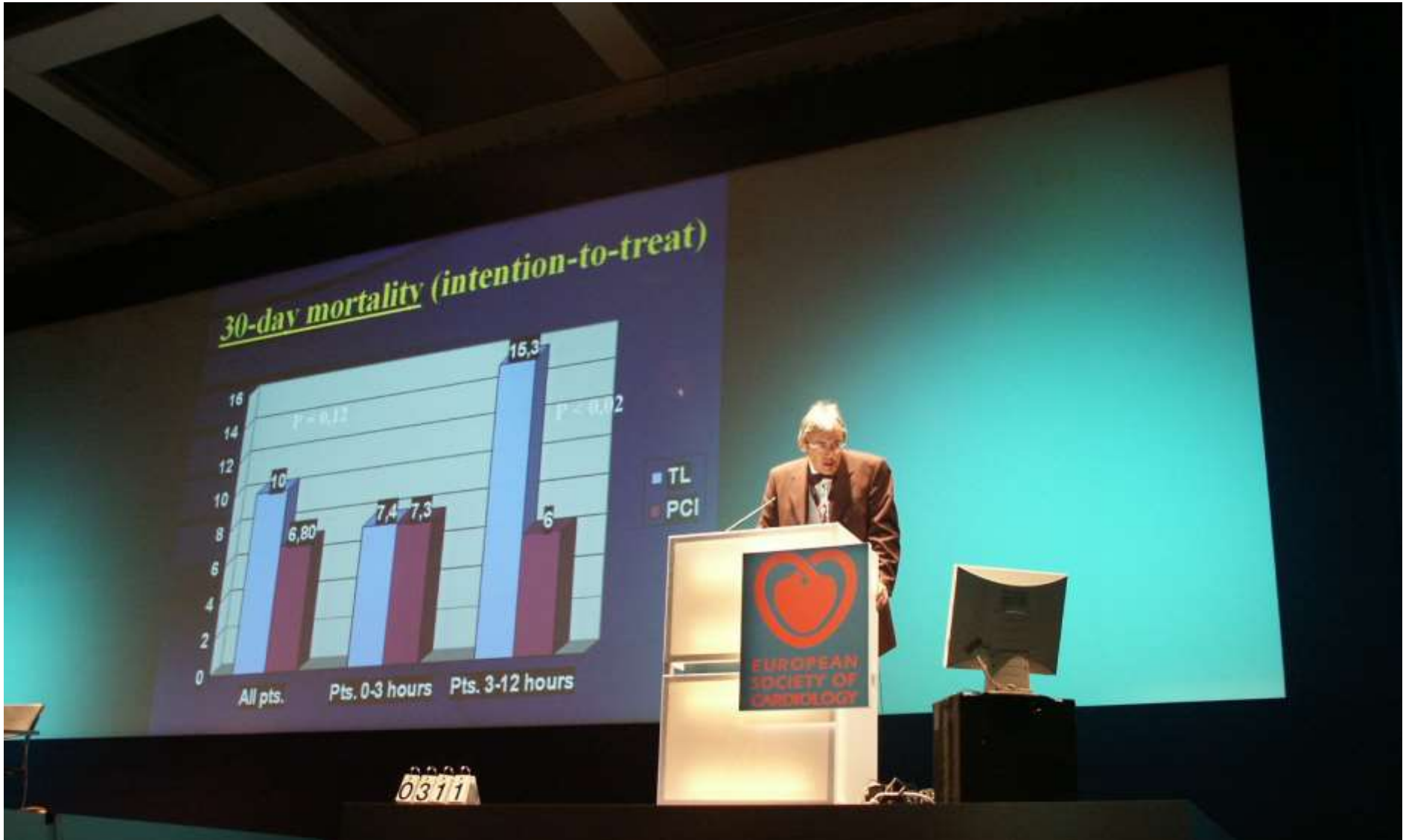
Cardiology Department, Hospital Na Homolce, Prague (15 patients): Pavel Formánek, MD., Petr Kmoníček, MD., Ondřej Aschermann, MD.

Medical Department II, General University Hospital, Prague (5 patients): Michal Aschermann, MD., DrSc., Stanislav Šimek, MD., Aleš Linhart, MD., PhD., František Holm, MD., Jan Bělohlávek, MD.

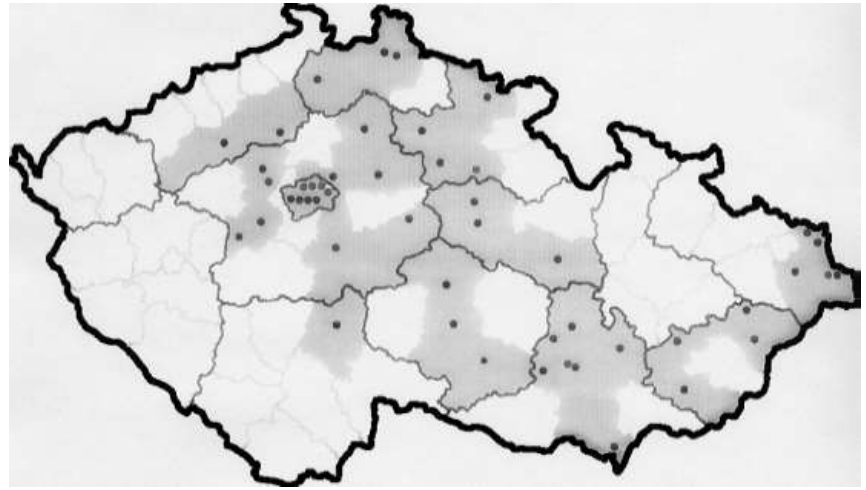
Community hospitals (with total randomized patients) and investigators (all are MD)

Třebíč (62 patients): Josef Štumar, Jiří Carda, Ondřej Toman, Pavel Růžička, Petr Konečný. *Vyškov (59 patients)*: Josef Veselý, Oldřich Synek, František Adamec, Vladimír Foret, Jiří Pinka. *Nymburk (57 patients)*: Arnošt Václavíček, David Vencour, Michal Hudcovic, Pavel Frič, Radka Sytarová, Hana Širová, Václav Hulínský. *Havířov (57 patients)*: Miloslav Durčák, Eva Pederzoliová. *Ivančice (49 patients)*: Petr Valeš, Miroslav Čech. *Kutná Hora (42 patients)*: Venuše Šmejkalová, Alena Kadlečková, Dana Ryšavá. *Slaný (42 patients)*: Gabriel Marcínek, Ondřej Čermák, Jan Mácha. *Mladá Boleslav (38 patients)*: Jiří Kotouš, Tomáš Kubiček, Zbyněk Košek. *Valašské Meziříčí (37 patients)*: Pavel Prodělal, Marie Líčeníková, Richard Wiesner. *Vsetín (34 patients)*: Jaroslav Doubravský, Jiří Ludva, Petr Palacký, Radmila Boháčová. *Tišnov (29 patients)*: Jaroslav Vykouřil, Jaroslav Svoboda. *Havlíčkův Brod (24 patients)*: Josef Málek, Jiřištefánek. *Kroměříž (24 patients)*: Lumír Francek, Pavel Třeštík. *Chrudim (23 patients)*: Josef Tuhý, Dalibor Kašík, Michal Wysocki. *Vysočany (22 patients)*: Eva Kosová, Jan Kaufman. *Uherské Hradiště (21 patients)*: Vladimír Okénka, Vladimír Klapal. *Svitavy (20 patients)*: Ivana Kellnerová, Emilie Smrčková. *Benešov (19 patients)*: Václav Havlík, Martin Otava. *Hořovice (17 patients)*: Eduard Kroupa. *Pardubice (16 patients)*: Marek Sychra. *Roudnice nad Labem (14 patients)*: Ilona Kašíková. *Břeclav (14 patients)*: Jitka Siegelová. *Boskovice (14 patients)*: Marie Lýčková. *Frýdek–Místek (14 patients)*: Tomáš Gistinger. *Brandýs nad Labem (13 patients)*: Richard Kobza. *Tábor (12 patients)*: Jindřich Charouzek. *Louny (9 patients)*: Jan Semrád. *Jičín (nine patients)*: Soňa Zajíčková. *Liberec (7 patients)*: Jiří Kot'átko. *Beroun (7 patients)*: Karel Sochor. *Karviná (6 patients)*: Jan Bolek. *Nový Bydžov (6 patients)*: Luděk Beran. *Jihlava (6 patients)*: Zdeněk Klimsa. *Na Františku (6 patients)*: Ivo Jokl. *Turnov (5 patients)*: Oldřich Honců. *Military Hospital Brno (5 patients)*: Tomáš Brabec. *Military Hospital Prague–Střešovice (5 patients)*: David Ručka. *Česká Lípa (3 patients)*: Zdeněk Holý. *Na Žižkové (1 patient)*: Zdeněk Felix.

Prezentace studie PRAGUE-2 v Hot Lines
ESC / WCC 2002 v Berlíně a na TCT 2002 ve Washingtonu



European Heart Journal (2003) 24, 94–104

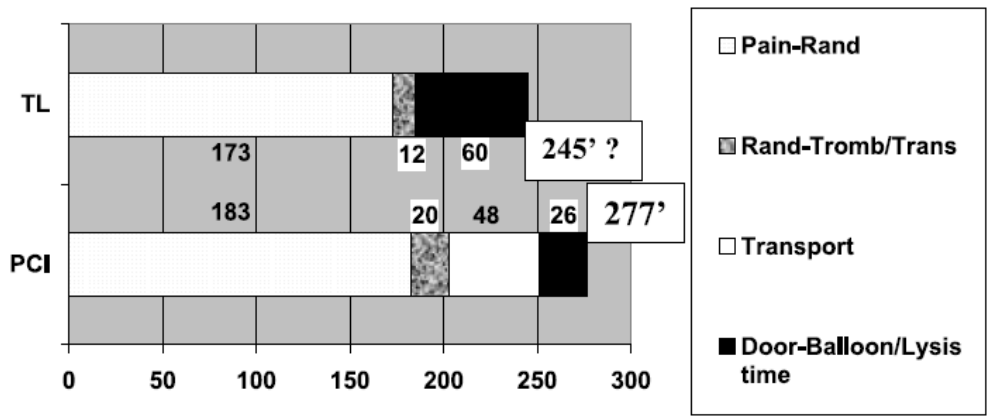


Long distance transport for primary angioplasty vs immediate thrombolysis in acute myocardial infarction

Final results of the randomized national multicentre trial—PRAGUE-2

P. Widimský†, T. Buděšínský, D. Voráč, L. Groch, M. Želízko, M. Aschermann, M. Branny, J. Št'ásek, P. Formánek, on behalf of the 'PRAGUE' Study Group Investigators*

Received 2 July 2002; accepted 3 July 2002



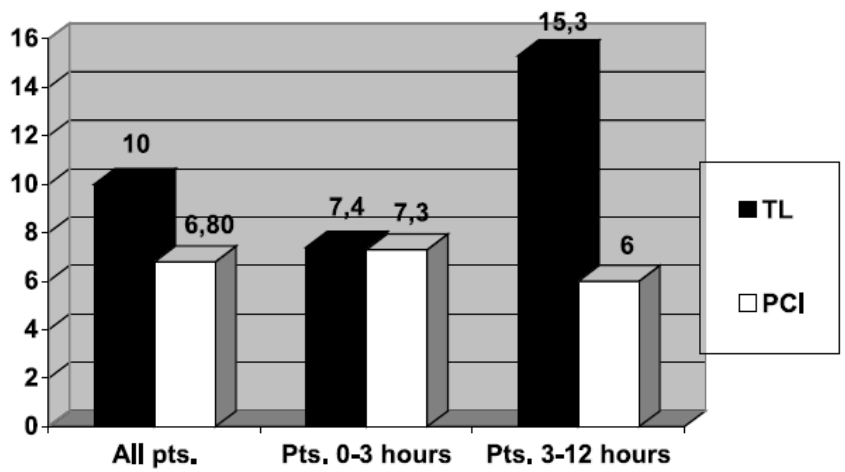


Figure 4 Thirty-day mortality (%) among all patients and among early vs late 'presenters'.

European Heart Journal (2007) 28, 679–684
doi:10.1093/eurheartj/ehl535

Long-term outcomes of patients with acute myocardial infarction presenting to hospitals without catheterization laboratory and randomized to immediate thrombolysis or interhospital transport for primary percutaneous coronary intervention. Five years' follow-up of the PRAGUE-2 trial

Petr Widimsky[1]*, Dana Bilkova[1], Martin Penicka[1], Martin Novak[2], Miroslava Lanikova[1], Vladimir Porizka[3], Ladislav Groch[2], Michael Zelizko[3], Tomas Budesinsky[1], and Michael Aschermann[1] on behalf of the PRAGUE Study Group Investigators

[1]Cardiocenter Vinohrady, Third Faculty of Medicine, Charles University, Srobarova 50, 100 34 Prague 10, Czech Republic; [2]Masaryk University, Brno, Czech Republic; and [3]IKEM, Prague, Czech Republic[†]

Received 7 August 2006; revised 10 January 2007; accepted 18 January 2007; online publish-ahead-of-print 13 February 2007

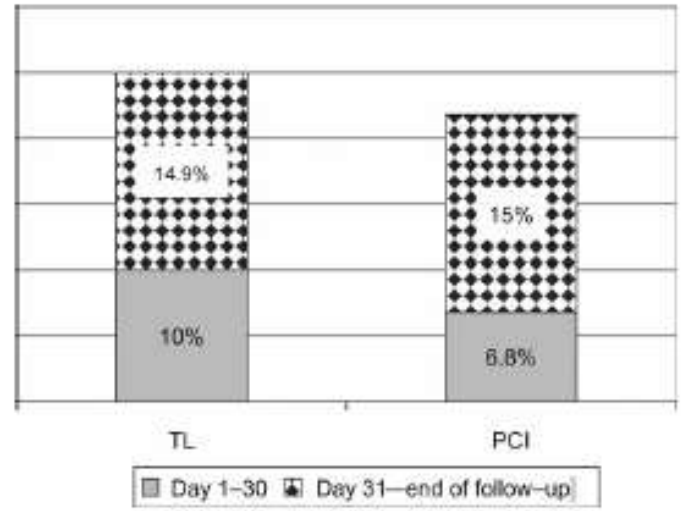


Figure 4 Late mortality among 30 day survivors (day 31 – end of follow-up) on top of early (day 1–30) mortality among all randomized patients.

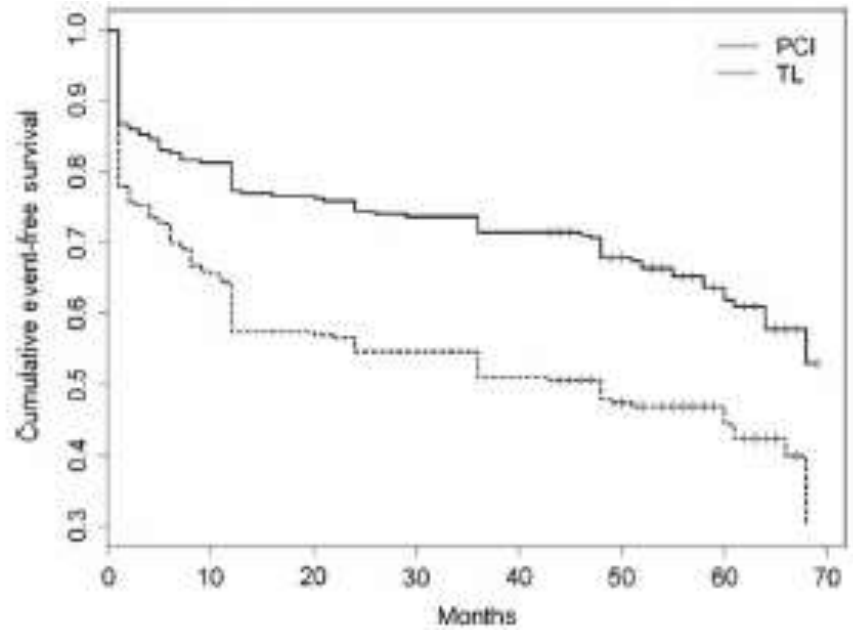


Figure 2 Kaplan Meier estimates of event-free survival (survival to the combined endpoint).

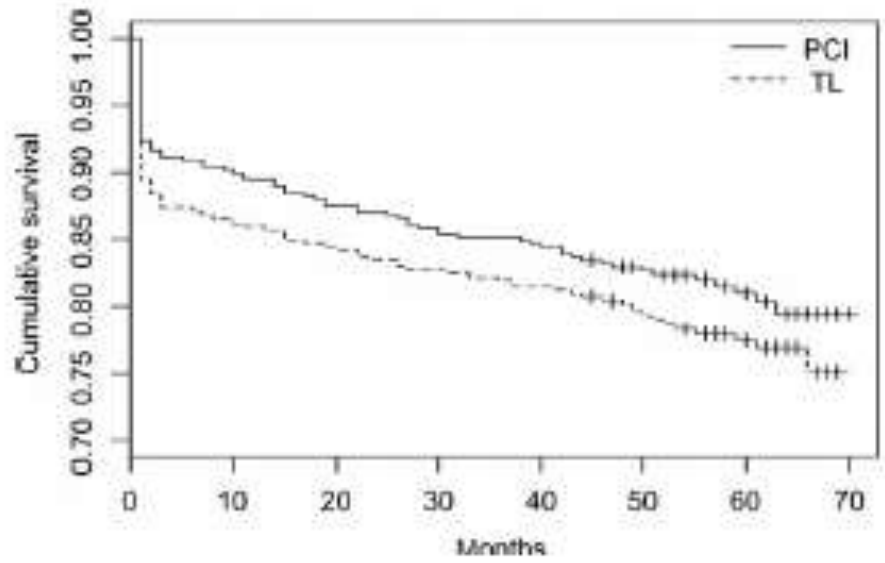


Figure 3 Kaplan Meier estimates of overall survival (survival to death from any cause).

Doporučení ČKS pro STEMI

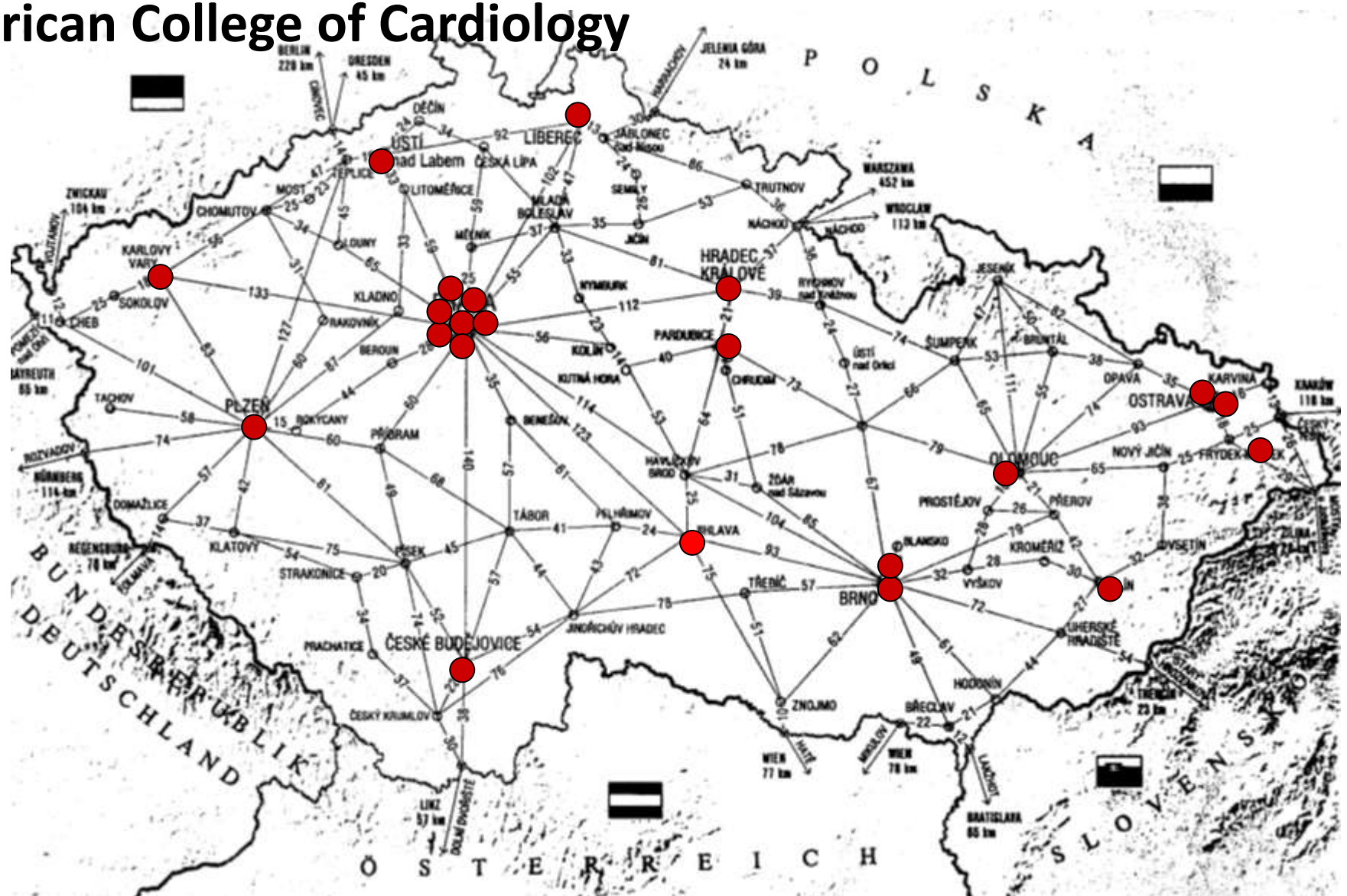
STEMI	ECG-PCI < 30 min.	ECG-PCI 30-90 min.	ECG-PCI > 90 min.
Pain-ECG < 3 hours	PCI	PCI	TL
Pain-ECG 3-12 hours	PCI	PCI	PCI

Primary PCI recommended by official guidelines:

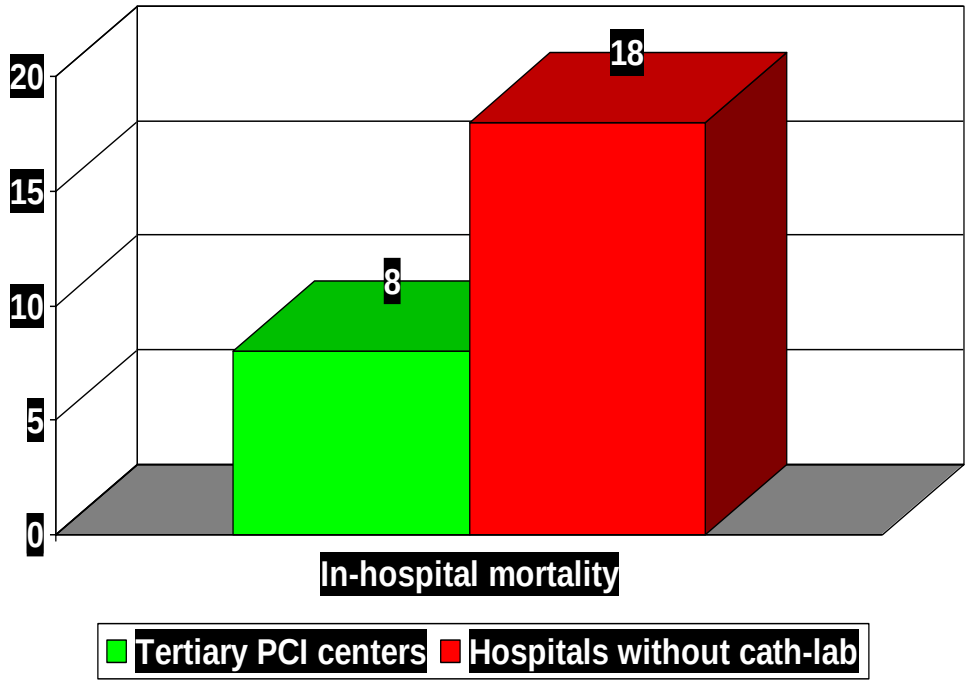
2002 Czech Society of Cardiology

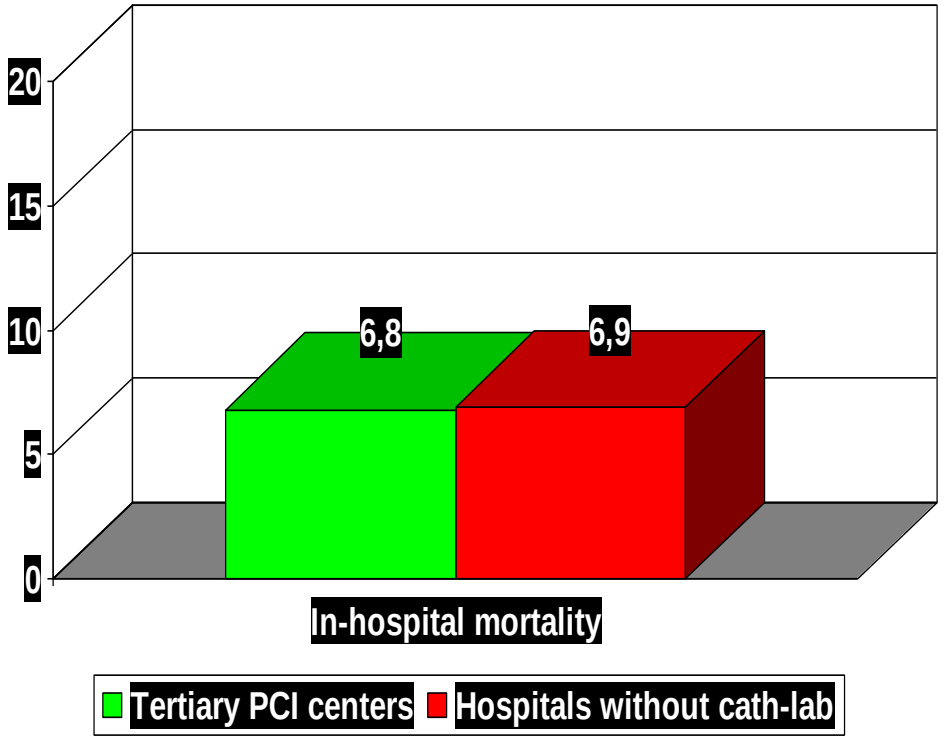
2003 European Society of Cardiology

2004 American College of Cardiology



Czech STEMI registries 1999 vs 2005: The nationwide implementation of P-PCI strategy completely abolished mortality differences between smaller hospitals and tertiary PCI centers





Stent for Life

E-Journal of Cardiology Practice

Current Volume

Previous volumes - E-Journal of Cardiology Practice

Articles by Theme

Subscribe

PCI in modern cardiology: a shift from chronic stable patients to acute coronary syndromes.

An article from the e-journal of the ESC Council for Cardiology Practice

Vol. 6, N° 36 - 27 May 2008

Prof. Petr Widimsky , FESC

The COURAGE and MASS II trials versus acute coronary syndromes trials have helped to evaluate the role of PCI should have in modern cardiology.
PCI does not improve prognosis in chronic stable coronary artery disease because the natural course is generally very good and because no culprit lesion exists in chronic stable patients. PCI improves prognosis in acute coronary syndromes on the other hand because the culprit lesion can be identified by angiography in most patients.
PCI centers should focus their resources (both human and financial) mainly on the treatment of acute coronary syndromes.

How the Stent for Life initiative began ?

- **EuroPCR Congress: A. Lafont, J. Marco, M. Tendera, P. Widimsky agreed to found the EAPCI**

- **ESC Board meeting, London, June 22, 2008:**

  William Wijns + Petr Widimský initiated the Stent for Life Initiative

- **Brussels, September 13, 2008:**

  The first SFL meeting

European Heart Journal Advance Access published November 19, 2009

European Heart Journal
doi:10.1093/eurheartj/ehp492

CLINICAL RESEARCH

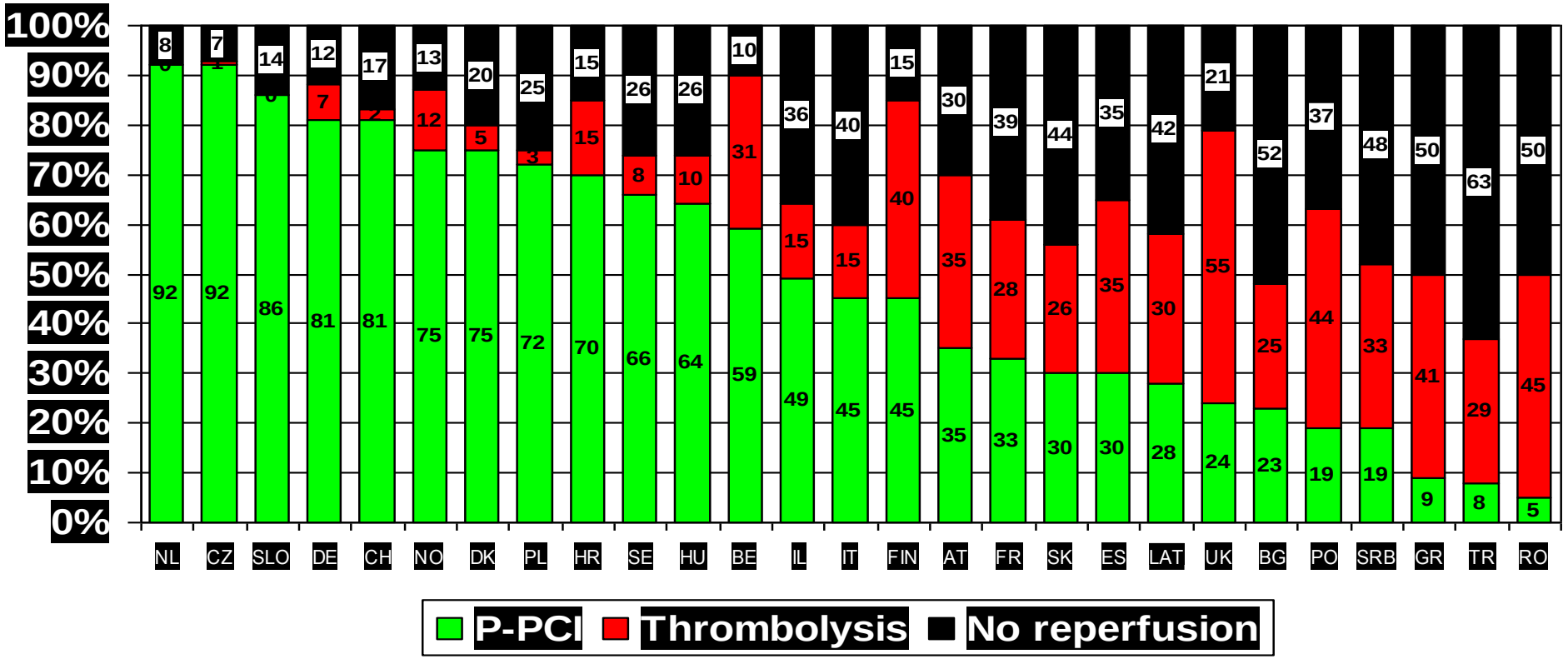
Reperfusion therapy for ST elevation acute myocardial infarction in Europe: description of the current situation in 30 countries

Petr Widimsky*, William Wijns, Jean Fajadet, Mark de Belder, Jiri Knot, Lars Aaberge, George Andrikopoulos, Jose Antonio Baz, Amadeo Betriu, Marc Claeys, Nicholas Danchin, Slaveyko Djambazov, Paul Erne, Juha Hartikainen, Kurt Huber, Petr Kala, Milka Klinčeva, Steen Dalby Kristensen, Peter Ludman, Josephina Mauri Ferre, Bela Merkely, Davor Miličić, Joao Morais, Marko Noč, Grzegorz Opolski, Miodrag Ostojić, Dragana Radovanovič, Stefano De Servi, Ulf Stenestrand, Martin Studenčan, Marco Tubaro, Zorana Vasiljević, Franz Weidinger, Adam Witkowski, and Uwe Zeymer on behalf of the European Association for Percutaneous Cardiovascular Interventions†

Cardiocenter, 3rd Faculty of Medicine, Charles University Prague, Czech Republic

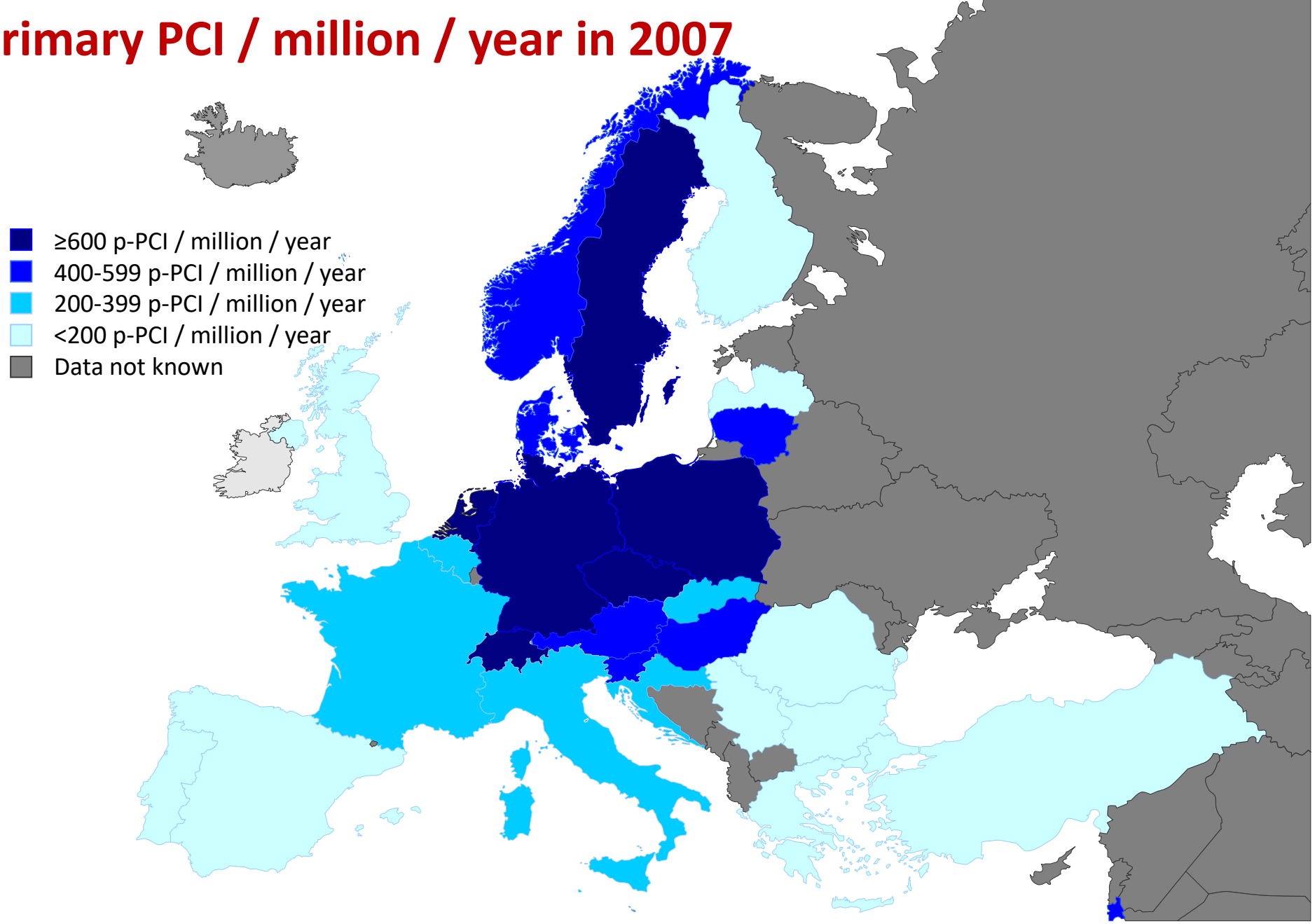
Received 15 March 2009; revised 20 August 2009; accepted 5 October 2009

Europe 2007



P.Widimsky et al. November 19, 2009. Reperfusion therapy for ST elevation acute myocardial infarction in Europe: description of the current situation in 30 countries. Eur. Heart.J.doi:10.1093/eurheartj/ehp492

Primary PCI / million / year in 2007



EuroIntervention 2009;5:299-309

EuroIntervention

How to set up an effective national primary angioplasty network: lessons learned from five European countries

Jiri Knot[1]*, MD; Petr Widimsky[1], MD, DrSc, FESC; William Wijns[2], MD, PhD, FESC; Ulf Stenestrand[3], MD, PhD; Steen Dalby Kristensen[4], MD, PhD, FESC; Arnoud van' t Hof[5], MD, PhD; Franz Weidinger[6], MD, PhD, FESC; Magnus Janzon[3], MD, PhD; Bjarne Linde Nörgaard[7], MD, PhD; Jacob Thorsted Soerensen[4], MD; Henri van de Wetering[8], MA, ANP; Kristian Thygesen[9], MD, DMSc, FESC; Per-Adolf Bergsten[10], MD; Christofer Digerfeldt[11], MD; Adriaan Potgieter[12], MD; Nadav Tomer[13], BSc, MBA; Jean Fajadet[14], MD, PhD, FESC on behalf of the "Stent for Life" Initiative[#]

1. Cardiocenter, Department of Cardiology, 3rd Faculty of Medicine Charles University and University Hospital Kralovske Vinohrady, Prague, Czech Republic; 2. Cardiovascular Center Aalst, Aalst, Belgium; 3. Department of Cardiology, University Hospital, Linköping, Sweden; 4. Department of Cardiology, Aarhus University Hospital Skejby, Århus, Denmark; 5. Department of Cardiology, Isala Klinieken, locatie Wezenlanden, Zwolle, The Netherlands; 6. Department of Medicine II, Hospital Rudolfstiftung, Vienna, Austria; 7. Department of Cardiology, Vejle Hospital, Vejle, Denmark; 8. Department of Cardiology, Isala Klinieken and Regionale Ambulance Voorziening IJsselland, Zwolle, The Netherlands; 9. Department of Medicine and Cardiology, Aarhus University Hospitál, Aarhus C, Denmark; 10. Medical Officer EMS, Östergötland, Linköping, Sweden; 11. Department of Internal Medicine, Vrinnevi Hospital, Norrköping, Sweden; 12. Abbott Vascular, Brussels, Belgium; 13. Cordis EMEA, Johnson & Johnson, Waterloo Belgium; 14. Department of Cardiology, Clinique Pasteur, Toulouse, France

[#] "Stent for Life" Initiative is a project jointly organised by the European Association of Percutaneous Cardiovascular Interventions (EAPCI) and EuroPCR, supported by EUCOMED and the ESC Working Group on Acute Cardiac Care. Project Steering Committee: Petr Widimsky, Jean Fajadet, Adriaan Potgieter, Nadav Tomer, William Wijns and Nicolas Danchin.

The authors have no conflict of interest to declare.

PRAGUE - 3

- Primární PCI u pacientů se STEMI / Q-IM, přicházejících do nemocnice mezi 12.-72.hodinou
- Koordinátor: doc. Jiří Kettner (IKEM)
- Zařazeno jen 44 pacientů, pak rozhodnuto o ukončení studie pro nízký počet zařazovaných nemocných
- Nikdy nepublikováno

PRAGUE - 4

One-Year Coronary Bypass Graft Patency

A Randomized Comparison Between Off-Pump and On-Pump Surgery Angiographic Results of the PRAGUE-4 Trial

Petr Widimsky, MD, DrSc, FESC; Zbynek Straka, MD, PhD; Petr Stros, MD; Karel Jirasek, MD; Jaroslav Dvorak, MD; Jan Votava, MD; Libor Lisa, MD; Tomas Budesinsky, MD; Miroslav Kolesar, MD; Tomas Vanek, MD, PhD; Petr Brucek, MD

Background—Off-pump coronary bypass surgery has become a widely used technique during recent years. However, limited data are available with regard to 1-year patency of bypass grafts implanted on the beating heart in unselected consecutive bypass surgery candidates. The aim of this study was to compare 1-year angiographic patency of bypass grafts done on the beating heart (off pump) with those done classically (on pump).

Methods and Results—The PRAGUE-4 trial randomized 400 consecutive nonselected cardiac surgery candidates into group A (on pump; n=192) and group B (off pump; n=208). One-year follow-up coronary angiography was done in 255 patients. The arterial graft patency after 1 year was 91% in both groups. Saphenous graft patency was 59% (on pump) versus 49% (off pump; *P*=NS). Saphenous graft patency per patient was lower in the off-pump group: 0.7 patent anastomosis per patient versus 1.1 patent anastomosis in the on-pump group (*P*<0.01). There were 46% on-pump patients with all grafts patent versus 52% off-pump patients (*P*=NS). Grafts anastomosed distally to collateralized chronic total occlusions of native coronary arteries remained patent in 100% on the left anterior descending artery compared with 23% on other arteries (*P*<0.0001).

Conclusions—The patency of arterial coronary bypass grafts done on the beating heart is excellent and equal to grafts done on pump. The off-pump procedure in the unselected patient population results in fewer patent saphenous grafts per patient. (*Circulation*. **2004;110:3418-3423.**)

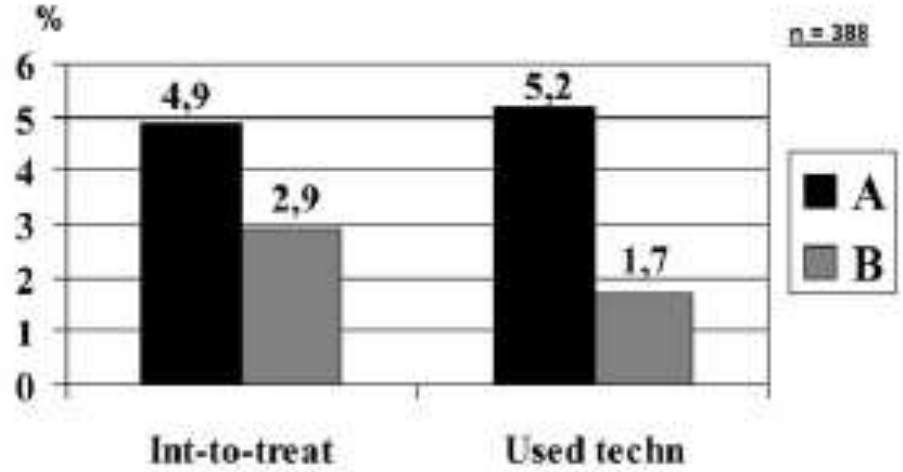


Figure 1. Primary clinical end point of PRAGUE-4 trial (death, myocardial infarction, stroke, newly developed renal failure requiring dialysis within 30 days). A indicates on pump; B, off pump.

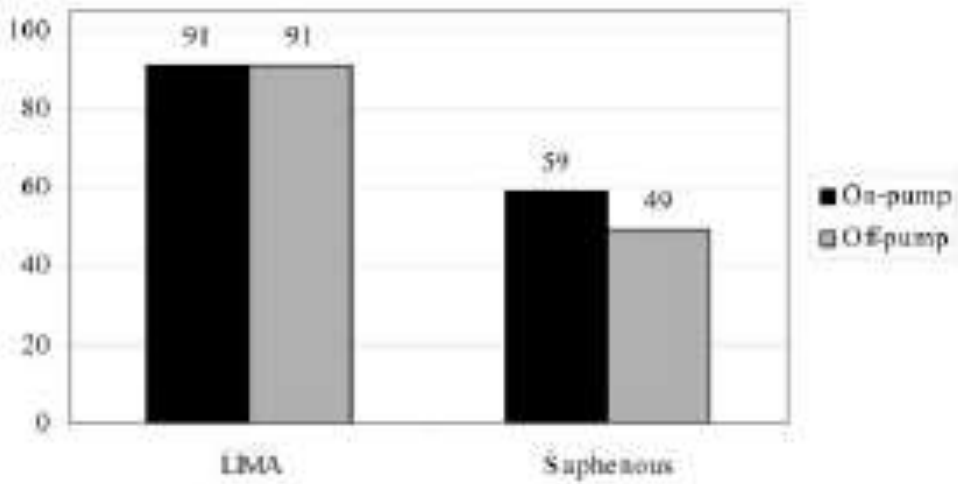


Figure 2. One-year patency (%) of grafts done on pump vs off pump (n=255).

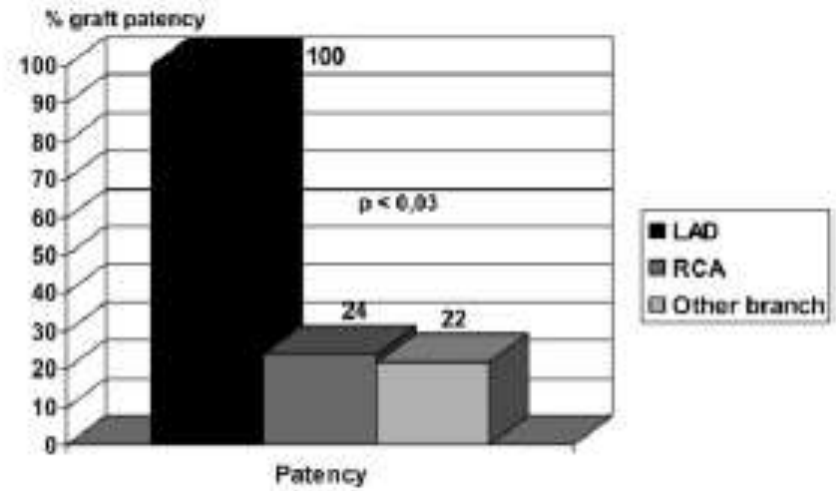


Figure 4. Percent graft patency in chronic collateralized total coronary occlusions.

PRAGUE - 5

Next Day Discharge After Successful Primary Angioplasty for Acute ST Elevation Myocardial Infarction

An Open Randomized Study "Prague-5"

Radovan JIRMÁR,[1] MD, Petr WIDIMSKÝ,[1] MD, Jan ČAPEK,[1] MD, Ota HLINOMAZ,[2] MD, *and* Ladislav GROCH,[1] MD

SUMMARY

This study tested the feasibility and safety of next day hospital discharge after successful primary PCI for uncomplicated STEMI. Twenty-three p-PCI patients (out of 271 consecutive patients) who fulfilled the study inclusion criteria were enrolled in the pilot nonrandomized phase (transfer of patients from the coronary unit to a standard ward within 24 hours after their admission) of the study. The randomized phase of the study screened a total of 1946 consecutive STEMI patients undergoing p-PCI in the two participating centers. Only 56 (ie, 2.9% from all p-PCI) very low risk patients residing less than 20 km from the PCI center were selected. They were randomized 1:2 to either a standard hospital stay (group A, $n = 19$, age, 58 ±8) or first day discharge (group B, $n = 37$, age, 56 ± 10; NS). There were no serious complications among 79 study patients within 30 days. The duration of hospital stay was 105 ±45 hours (group A) and 29 ± 3 hours ($P < 0.0001$) in group B. Ejection fraction after 30 days was 56.8 ± 6.5% in group A versus 57.3 ± 7% in group B (NS). A patient comfort questionnaire showed a clear preference of first day discharge in all patients randomized into group B.

The results indicate that next day discharge after successful p-PCI is feasible and safe in selected uncomplicated STEMI patients. (Int Heart J 2008; 49: 653-659)

Table II. Baseline Clinical Data of the Study Patients

	Pilot phase patients	Group A patients	Group B patients
n	23	19	37
Mean age ± SD	58 ± 10	58 ± 8	56 ± 10
Females	13%	32%	46%
Diabetes mellitus	22%	32%	19%
Hypertension	39%	32%	46%
Smokers (incl. past)	70%	68%	57%
Hypercholesterolemia	30%	37%	24%
Anterior location of MI	57%	21%	32%

Table III. Clinical Endpoints Within 30 Days

	Pilot phase patients	Group A patients	Group B patients
n	23	19	37
Duration of hospital stay (hours)	119 ± 47	105 ± 45	29 ± 3
Death	0	0	0
Reinfarction	0	0	0
Stroke	0	0	0
Recurrent ischemia	0	0	0
Repeat target vessel revascularization	0	0	0
Arterial access site complications requiring treatment	1	0	0
Rehospitalization	0	0	1
30 days left ventricular ejection fraction (%)	50.6 ± 5.4	56.8 ± 6.5	57.3 ± 7.0

PRAGUE - 6

Off-pump versus on-pump coronary artery bypass grafting surgery in high-risk patients: PRAGUE-6 trial at 30 days and 1 year

Jan Hlavicka[a], Zbynek Straka[a], Stepan Jelinek[a], Petr Budera[a], Tomas Vanek[a], Marek Maly[b], Petr Widimsky[a]

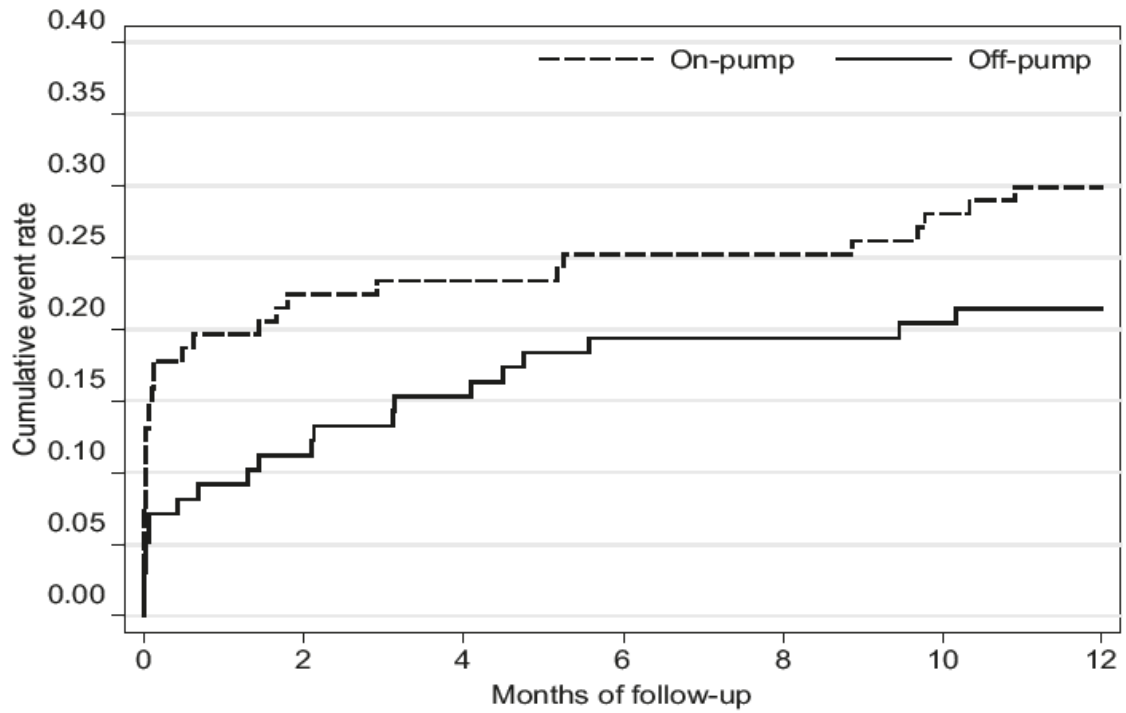


Fig. 1. Kaplan-Meier curves. The incidence of combined primary end point during the first postoperative year.

PRAGUE - 7

Acute Cardiac Care, 2011; Early Online, 1–7

ISSN 1748-2941 print/ISSN 1748-295X online
DOI: 10.3109/17482941.2011.567282

informa
healthcare

ORIGINAL ARTICLE

Routine upfront abciximab versus standard periprocedural therapy in patients undergoing primary percutaneous coronary intervention for cardiogenic shock: The PRAGUE-7 Study. An open randomized multicentre study

Petr Tousek[1], Richard Rokyta[2], Jitka Tesarova[2], Radek Pudil[3], Jan Belohlavek[4], Josef Stasek[3], Filip Rohac[1] & Petr Widimsky[1]

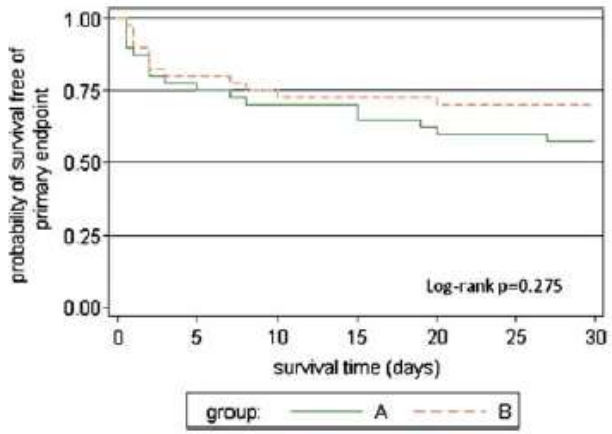


Figure 1. Kaplan-Meier estimates of survival free of primary endpoint.

Table III. Patients' outcome.

	Group A	Group B	*P*-value
Primary endpoint, *n* (%)	17 (42.5)	11 (27.5)	0.241
Death at 30 days, *n* (%)	15 (37.5)	9 (22.5)	0.222
Stroke, *n* (%)	1 (2.5)	2 (5)	0.872
Reinfarction, *n* (%)	0 (0.0)	0 (0.0)	
Severe acute renal failure, *n* (%)	3 (7.5)	3 (7.5)	1.000
EF% at 30 days, mean (SD)	44 (11)	41 (12)	0.205
Major bleeding, *n* (%)	7 (17.5)	3 (7.5)	0.310
TIMI major bleeding, *n* (%)	4 (10)	2 (5)	0.675
TIMI minor or minimal bleeding, *n* (%)	6 (15)	6 (15)	1.000
Hospital stay, days, mean (SD)	14 (14)	15 (15)	0.316

PRAGUE - 8

European Heart Journal (2008) 29, 1495–1503
doi:10.1093/eurheartj/ehn169

Clopidogrel pre-treatment in stable angina: for all patients >6 h before elective coronary angiography or only for angiographically selected patients a few minutes before PCI? A randomized multicentre trial PRAGUE-8

Petr Widimský[1]*, Zuzana Motovská[1], Stanislav Šimek[2], Petr Kala[4], Radek Pudil[3], František Holm[5], Robert Petr[1], Dana Bílková[1], Hana Skalická[2], Petr Kuchynka[2], Martin Poloczek[4], Roman Miklík[4], Marek Malý[6], and Michael Aschermann[2] on behalf of the PRAGUE-8 trial Investigators

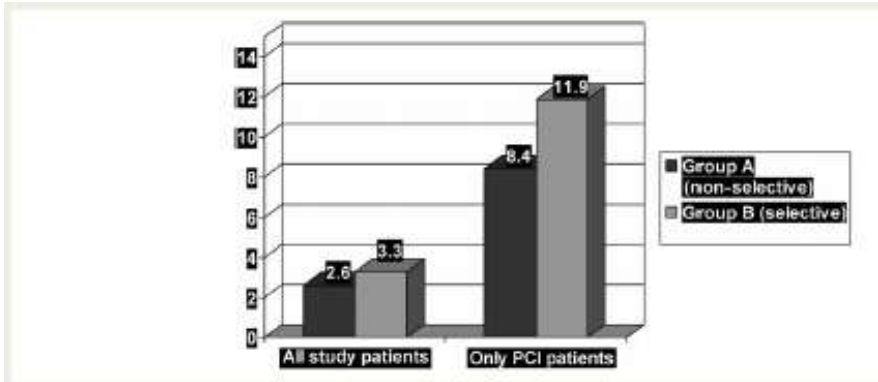


Figure 2 Periprocedural troponin elevation (>3× ULN, per cent of patients).

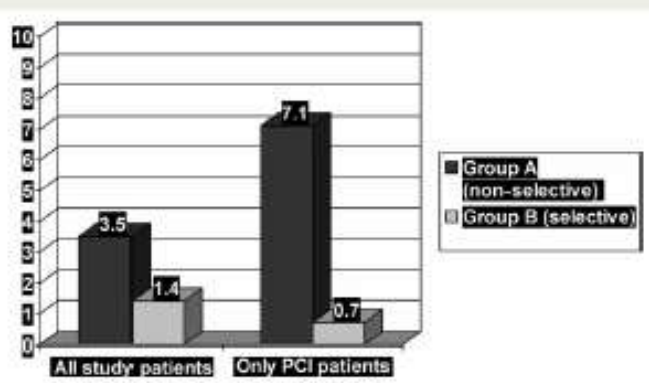


Figure 3 Bleeding complications (major+minor, in per cent) among all study patients and among PCI patients only.

PRAGUE - 9

- **Ambiciozní projekt**
- **ICHS s MVD + mitrální regurgitace**
- **Randomizace do dvou větví:**

(A) Kompletní chirurgické řešení (CABG + MVP)

(B) Jen katetrizační revaskularizace (PCI)

Ukončeno pro pomalý náběr nemocných, kteří většinou odmítali randomizaci (část preferovala operaci, část naopak PCI)

PRAGUE - 10

- Trimetazidin u srdečního selhání
- Koordinátor: doc. Petr Ošťádal
- Studie nebyla realizována

PRAGUE - 11

Platelet activity and aspirin efficacy after off-pump compared with on-pump coronary artery bypass surgery: Results from the prospective randomized trial PRAGUE 11–Coronary Artery Bypass and REactivity of Thrombocytes (CABARET)

Frantisek Bednar, MD, PhD,[a] Pavel Osmancik, MD, PhD,[b] Tomas Vanek, MD, PhD,[a] Heidi Mocikova, MD, PhD,[c] Martin Jares, MD,[a] Zbynek Straka, MD, PhD,[a] and Petr Widimsky, MD, PhD, FESC[b]

Conclusions

The PRAGUE 11–CABARET trial is the first prospective randomized study that demonstrates a significantly higher platelet activity in off-pump compared with on-pump CABG in the early postoperative period by means of a generally accepted marker of platelet activity. It also proves that aspirin insufficiency is a real problem that is present in the early postoperative period, and it is probably expressed in different ways between the off-pump and on-pump CABG operations.

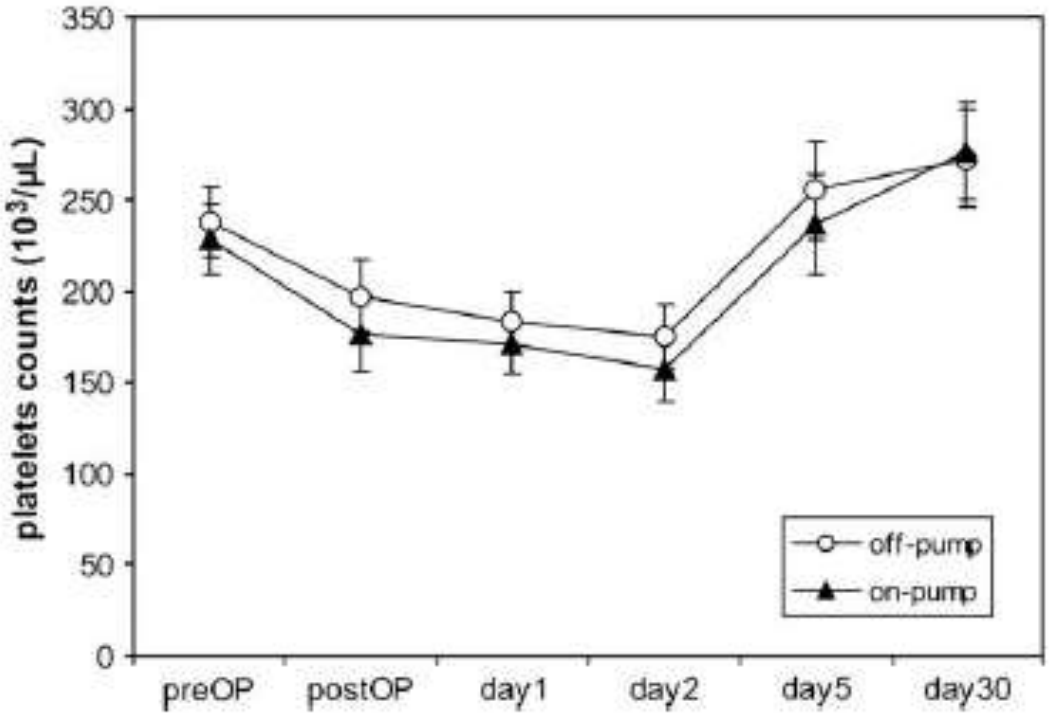


Figure 1. Platelet counts. Platelet counts in the off-pump and on-pump groups at different time points. In the on-pump group there is a tendency toward lower platelet counts because of extracorporeal circulation. No statistically significant differences were found between the groups at any time points. Data are expressed as medians with 95% confidence intervals. *preOP*, Preoperative; *postOP*, postoperative.

PRAGUE - 12

European Heart Journal (2012) 33, 2644–2652
doi:10.1093/eurheartj/ehs290

FASTTRACK
ESC HOT LINE

Comparison of cardiac surgery with left atrial surgical ablation vs. cardiac surgery without atrial ablation in patients with coronary and/or valvular heart disease plus atrial fibrillation: final results of the PRAGUE-12 randomized multicentre study†

Petr Budera[1]*, Zbyněk Straka[1], Pavel Osmančík[1], Tomáš Vaněk[1], Štěpán Jelínek[1], Jan Hlavička[1], Richard Fojt[1], Pavel Červinka[2], Michal Hulman[3], Michal Šmíd[4], Marek Malý[5], and Petr Widimský[1]

[1]Cardiocenter, Third Faculty of Medicine, Charles University Prague, Czech Republic; [2]Cardiology Department, Masaryk Hospital, Ust nad Labem, Czech Republic; [3]National Institute of Cardiovascular Diseases, Bratislava, Slovakia; [4]Cardiocenter, Faculty of Medicine in Pilsen, Charles University Prague, Czech Republic; and [5]National Institute of Public Health, Prague, Czech Republic

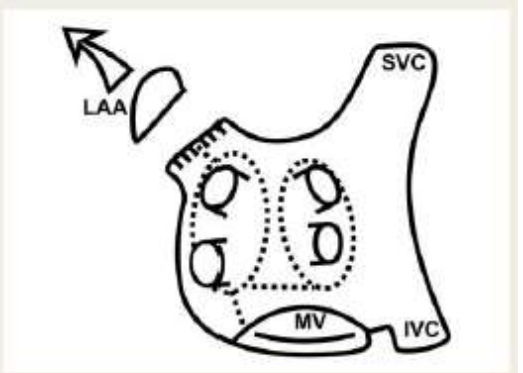


Figure 1 Schematic drawing of the left atrium in a postero-anterior view with the cryo-ablation lesions (dotted lines) and the left atrial appendage resection. LAA, left atrial appendage; SVC, superior vena cava; IVC, inferior vena cava; MV, mitral valve.

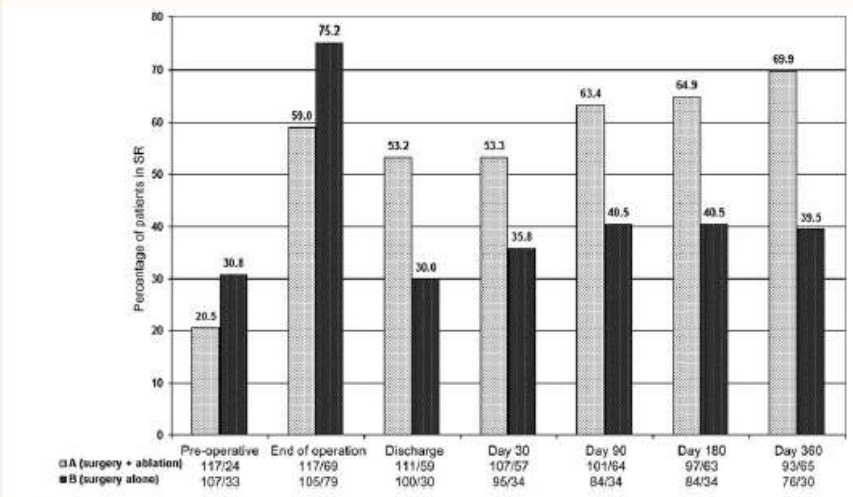


Figure 2 Electrocardiogram-verified sinus rhythm prevalence graph. The numbers below each column represent the number of electrocardiograms analysed/the number of electrocardiograms with sinus rhythm. Overall completeness of clinical follow-up (patients who died were included) was 97.8% at 1 month, 94.6% at 3 months, 95.1% at 6 months, and 91.4% at 1 year.

Table 5 Primary safety endpoint (30 days)

Complications	Group A (with ablation) ($n = 116$)	Group B (without ablation) ($n = 102$)	*P*-value
Primary combined safety endpoint	12 (10.3%)	15 (14.7%)	0.411
Death	9 (7.8%)	9 (8.8%)	0.809
Myocardial ischaemia	2 (1.7%)	2 (2.0%)	1
Stroke	2 (1.7%)	4 (3.9%)	0.422
Renal failure with HD	1 (0.9%)	4 (3.9%)	0.188

Data are presented as number with percentage in brackets. Fisher's exact test was used. HD, haemodialysis.

Table 6 One-year complications

Complications	Group A (with ablation) ($n = 111$)	Group B (without ablation) ($n = 92$)	*P*-value
Death	18 (16.2%)	16 (17.4%)	0.800
Bleeding	11 (9.9%)	9 (9.8%)	0.654
Stroke	3 (2.7%)	4 (4.3%)	0.319
Heart failure	26 (23.4%)	24 (26.1%)	0.680
Combined	45 (40.5%)	37 (40.2%)	0.785

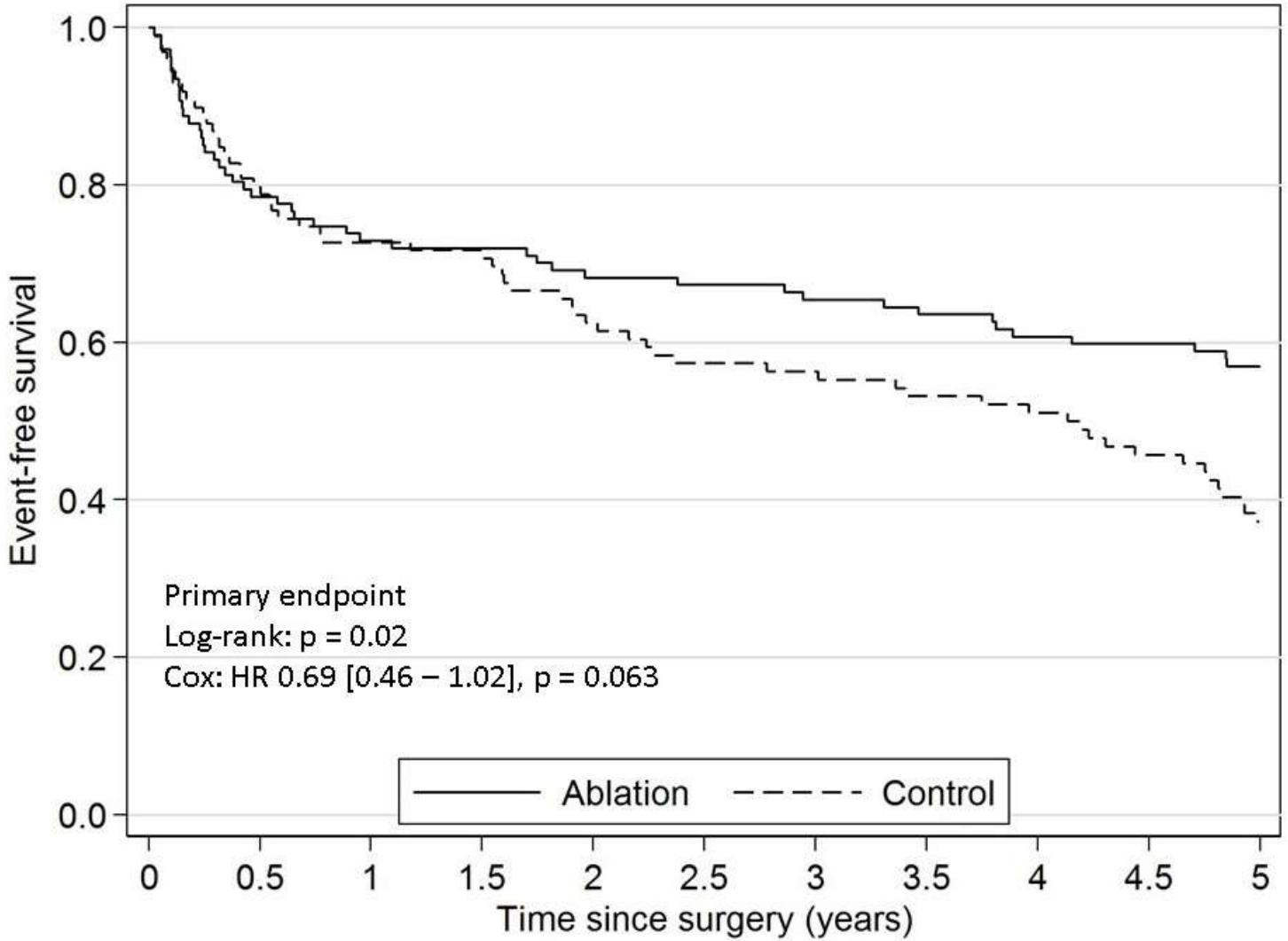
Fisher's exact test was used. The groups were compared using the log rank test for interval censored data. n, number of patients.

Conclusion: Surgical ablation improves the likelihood of SR post-operatively without increasing peri-operative complications. However, the higher prevalence of SR did not translate to improved clinical outcomes at 1 year. Further follow-up is warranted to show any potential clinical benefit which might occur later.

Five-year Outcomes in Cardiac Surgery Patients with Atrial Fibrillation Undergoing Concomitant Surgical Ablation Versus No Ablation. The Long-term Follow-up of the Prague-12 Study.

Pavel Osmancik[1]*, Petr Budera[2], David Talavera[2], Jan Hlavicka[2], Dalibor Herman[1], Jiri Holy[3], Pavel Cervinka[3], Jiri Smid[4], Jan Opatrny[4], Peter Hanak[5], Robert Hatala[5], Petr Widimsky[1]

Submitted on April 9,2019.



PRAGUE - 13

Multivessel coronary disease diagnosed at the time of primary PCI for STEMI: complete revascularization versus conservative strategy. PRAGUE 13 trial

O. Hlinomaz
ICRC, St. Anne University Hospital, Brno, Czech Republic
On behalf of the PRAGUE-13 Investigators

L. Groch, K. Polokova, F. Lehar, T. Vekov, R. Petkov, M. Stoynev, M. Griva, J. Sitar, M. Rezek, M. Novak, J. Semenka, N. Penkov, B. Gersh, D. Holmes, G. Sandhu, P. Widimsky

Grant IGA Czech Republic NT11412-5/2010, VAVPI EU Project
NCT01332591

This trial found no difference (not even a trend) favouring staged multivessel PCI over culprit-only primary PCI in STEMI. Larger trials are needed to clarify the revascularization strategy in STEMI patients with multivessel disease.

PRAGUE - 14

Neth Heart J (2014) 22:372–379
DOI 10.1007/s12471-014-0575-3

ORIGINAL ARTICLE

Perioperative cardiovascular complications versus perioperative bleeding in consecutive patients with known cardiac disease undergoing non-cardiac surgery. Focus on antithrombotic medication. The PRAGUE-14 registry

P. Widimský · Z. Moťovská · L. Havlůj · M. Ondráková · R. Bartoška · L. Bittner · L. Dušek · V. Džupa · J. Knot · M. Krbec · L. Mencl · J. Pachl · R. Grill · P. Haninec · P. Waldauf · R. Gürlich

Conclusions

Perioperative cardiovascular complications in these high-risk elderly all-comer surgical patients with known cardiovascular disease are relatively rare, but once they occur, the case fatality is high. Perioperative bleeding complications are more frequent, but their case fatality is extremely low. Patterns of interruption of chronic aspirin therapy before major noncardiac surgery are not predictive for perioperative complications (neither cardiovascular, nor bleeding). Simple baseline clinical factors are better predictors of outcomes than antithrombotic drug interruption patterns.

PRAGUE - 15

Resistant Hypertension

Role of Adding Spironolactone and Renal Denervation in True Resistant Hypertension

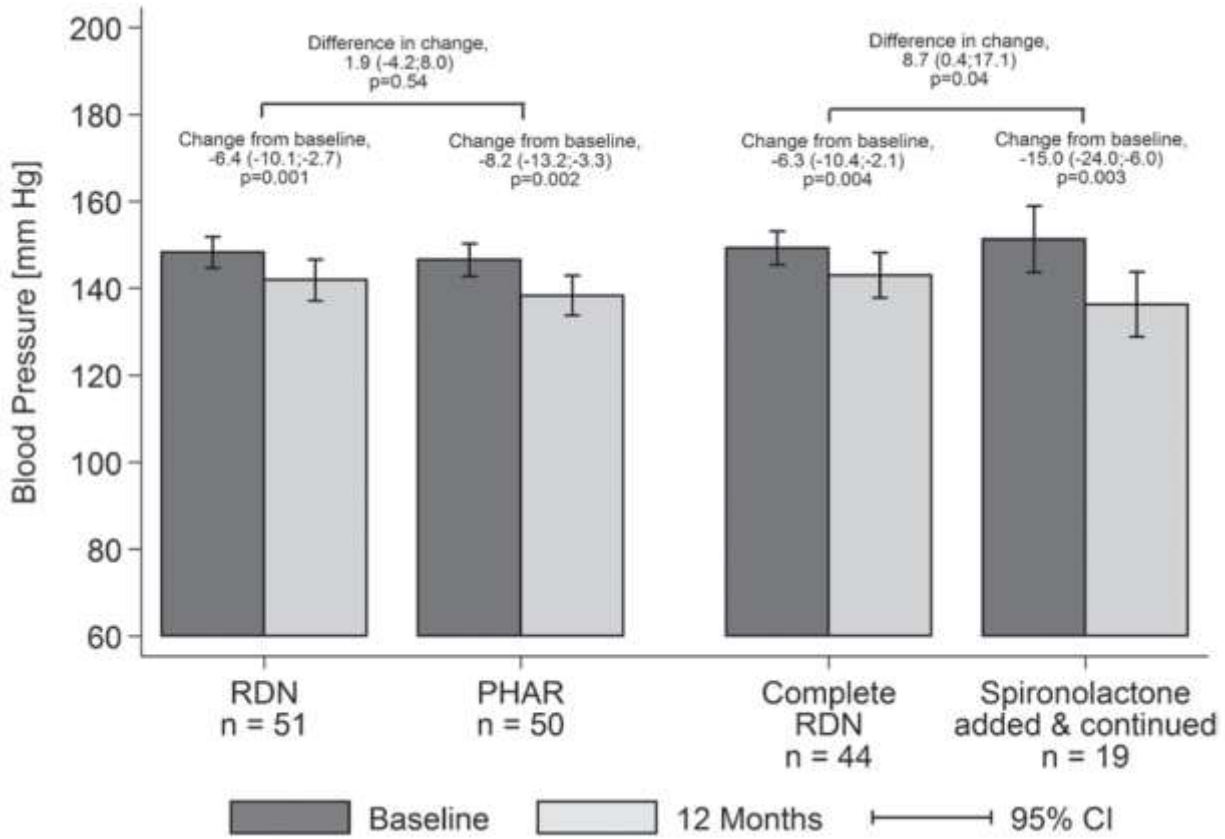
One-Year Outcomes of Randomized PRAGUE-15 Study

Ján Rosa, Petr Widimský, Petr Waldauf, Lukáš Lambert, Tomáš Zelinka, Miloš Táborský, Marian Branny, Petr Toušek, Ondřej Petrák, Karol Čurila, František Bednář, Robert Holaj, Branislav Štrauch, Jan Václavík, Igor Nykl, Zuzana Krátká, Eva Kociánová, Otakar Jiravský, Gabriela Rappová, Tomáš Indra, Jiří Widimský Jr

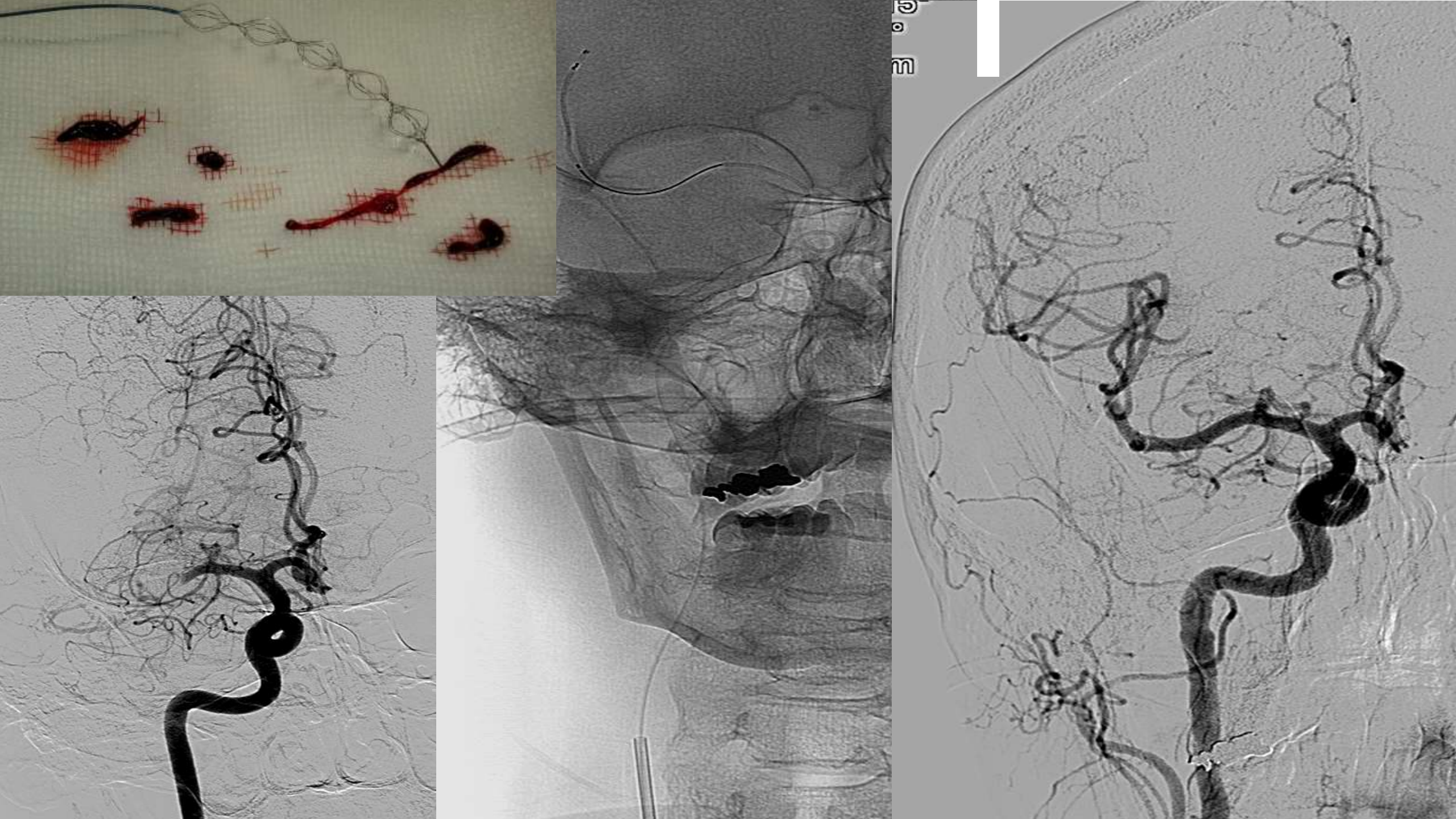
(***Hypertension*. 2016;67:397-403)**

Conclusion

This study shows that, over a period of 12 months, RDN is safe, with no serious side effects. However, within the setting of true RH with confirmed compliance, it is not superior to intensified pharmacological treatment. Spironolactone addition itself, when tolerated and maintained within 12 months, seems to be more effective in BP reduction, when compared with complete RDN. Other studies with RDN aimed at an improvement of the technical aspects or population selection are needed for a final evaluation of RDN.



PRAGUE - 16



Angiographic outcomes

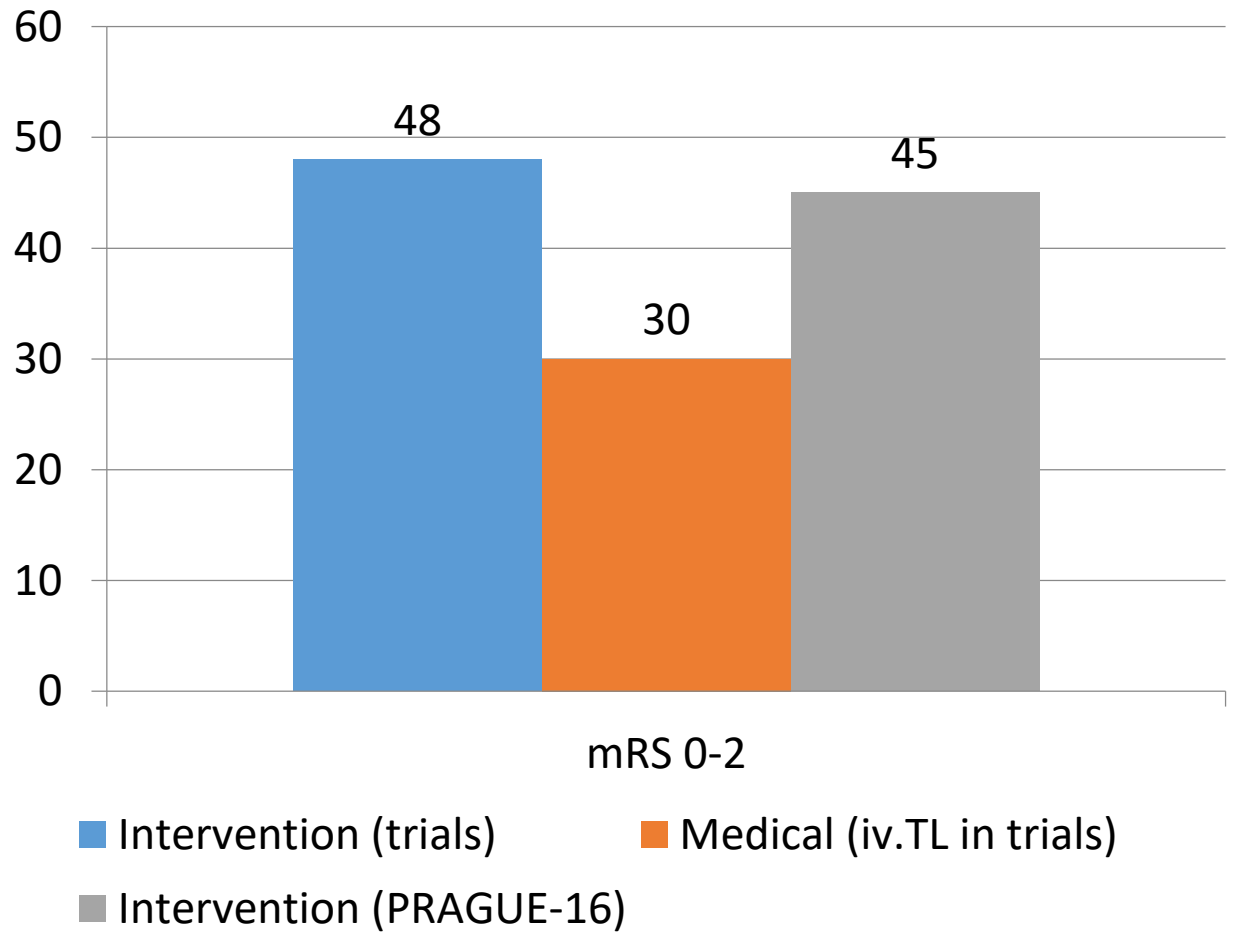
	d-CBT	bridging TL + CBT
Mean periprocedural UFH dose [units]	2765	1886
Tandem occlusion (ICA + MCA) or T-occlusion (terminal ICA, or MCA + ACA)	40%	30%
Isolated MCA occlusion	51%	30%
Isolated proximal ICA occlusion	4%	20%
Angiographic success (TICI 2b-3 at the end of procedure)	**75%**	**85%**

Clinical outcomes per stroke location

- **Overall: neurologic recovery (mRS ≤2 after 90 days) in 45% patients.**
- **Anterior: 58% mRs ≤2 in isolated occlusion of the middle cerebral artery (MCA)**
- **Posterior: 27% mRs ≤2 in basilar/ vertebral occlusions.**

Comparison with data from recent large randomized trials

	Intervention + medical therapy (recovered / all patients)	Medical therapy alone (recovered / all patients)
MR CLEAN	77 / 233	51 / 267
ESCAPE	89 / 164	43 / 147
EXTEND IA	25 / 35	14 / 35
SWIFT PRIME	59 / 98	33 / 93
REVASCAT	45 / 103	29 / 103
THERAPY	17 / 41	12 / 41
THRACE	103 / 190	82 / 195



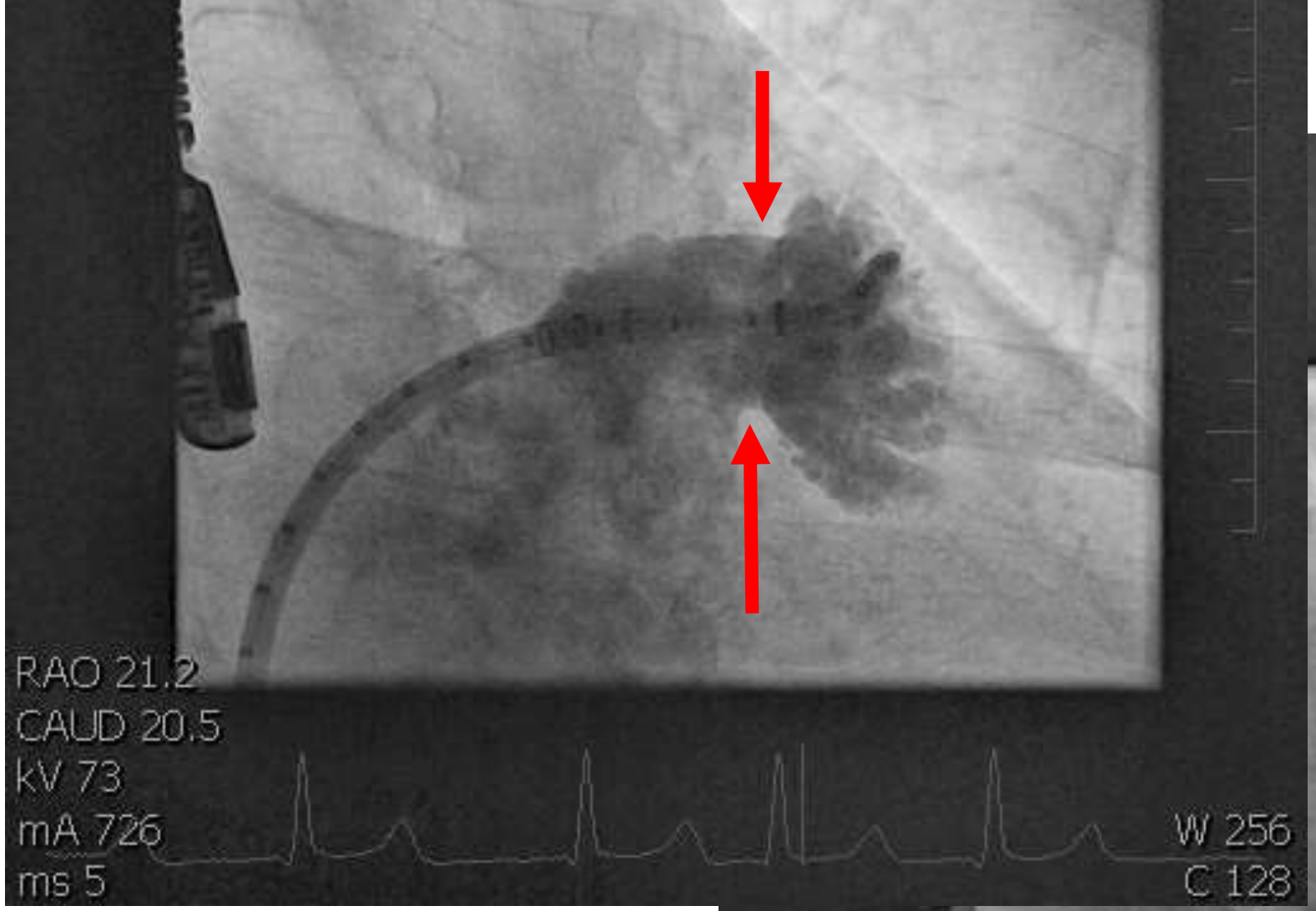
EuroIntervention 2017;13:1-8 published online jaa February 20

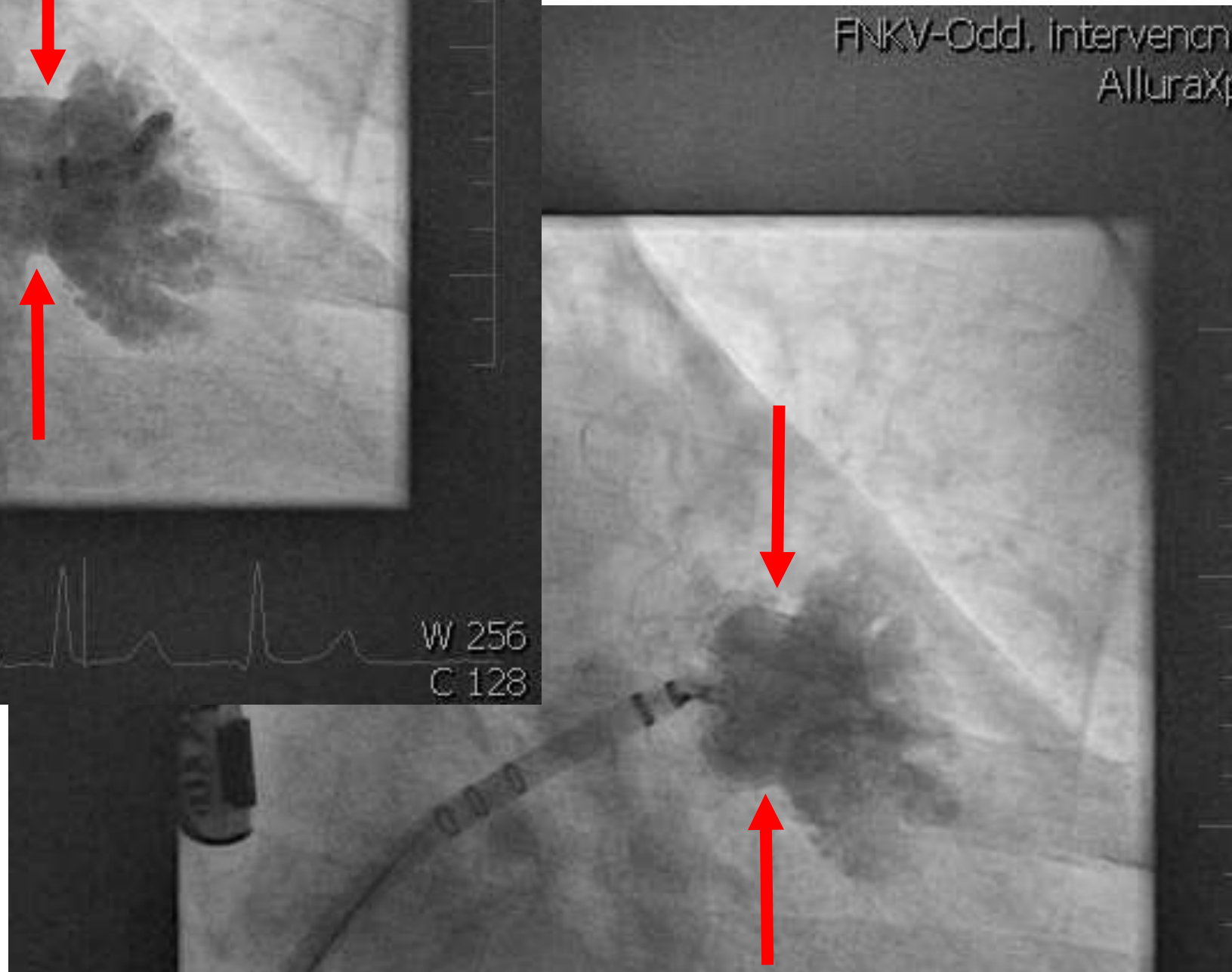
Feasibility and safety of direct catheter-based thrombectomy in the treatment of acute ischaemic stroke. Cooperation among cardiologists, neurologists and radiologists. Prospective registry PRAGUE-16

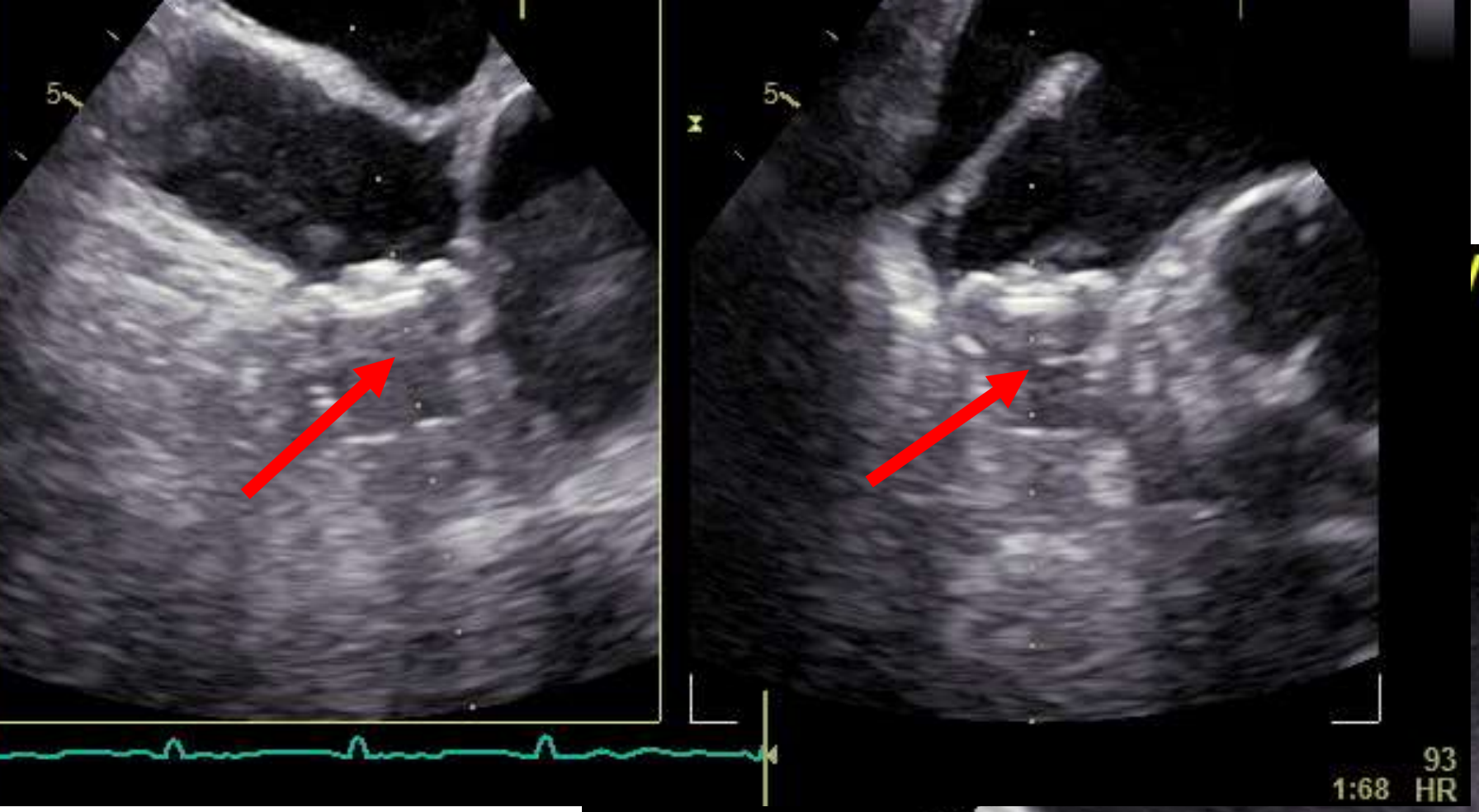
Petr Widimsky*, MD, DrSc; Boris Koznar, MD, PhD; Tomas Peisker, MD, PhD; Peter Vasko, MD, PhD; Filip Rohac, MD; Jana Vavrova, MD; Josef Kroupa, MD; Ivana Stetkarova, MD, PhD

	All patients	Direct CBT	Bridging thrombolysis +CBT
N	115	84	31
mRS 0-2 after 90 days (all strokes)	41/103 (40%)	28/78 (36%)	13/25 (52%)
Anterior strokes	39/90 (43%)	28/70 (40%)	11/20 (55%)
MCA occlusions only	24/44 (55%)	19/37 (51%)	5/7 (71%)
Any symptomatic intracranial haemorrhage (NIHSS increase ≥4, all strokes)	5/115 (4%)	3/84 (3.6%)	2/31 (6.5%)
7-day mortality (all strokes)	14/115 (12.2%)	9/84 (10.7%)	5/31 (16.1%)

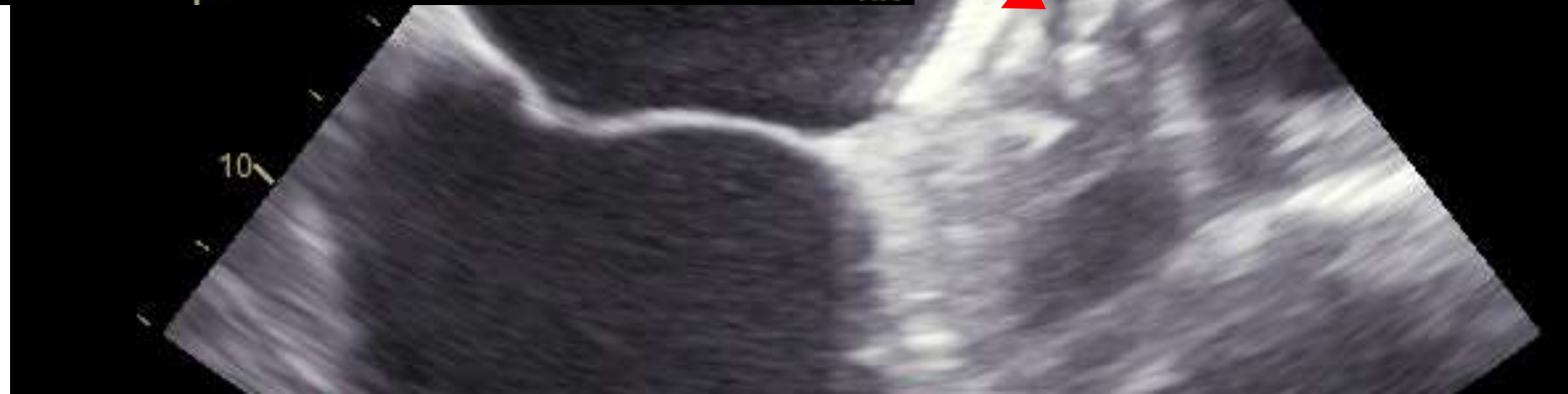
PRAGUE - 17


RAO 21.2
CAUD 20.5
kV 73
mA 726
ms 5
W 256
C 128


FNKV-Odd. intervencn
AlluraXp


5
5
93
1:68 HR


83


10

Interventional left atrial appendage closure vs novel anticoagulation agents in patients with atrial fibrillation indicated for long-term anticoagulation (PRAGUE-17 study)

Pavel Osmancik, MD, PhD,[a] Petr Tousek, MD, PhD,[a] Dalibor Herman, MD, PhD,[a] Petr Neuzil, MD, CSc,[b] Pavel Hala, MD,[b] Josef Stasek, MD, PhD,[c] Ludek Haman, MD, PhD,[c] Petr Kala, MD, PhD,[d] Martin Poloczek, MD,[d] Marian Branny, MD, PhD,[e] Jan Chovancik, MD,[e] Pavel Cervinka, MD, PhD,[f] Jiri Holy, MD,[f] Vlastimil Vancura, MD, PhD,[g] Richard Rokyta, MD, PhD,[g] Milos Taborsky, MD, CSc,[h] Tomas Kovarnik, MD, PhD,[i] David Zemanek, MD, PhD,[i] Petr Peichl, MD, PhD,[j] Sarka Haskova, Eng,[k] Jiri Jarkovsky, Eng,[k] and Petr Widimsky, MD, DrSc[a], on behalf of the PRAGUE-17 Investigators *Prague, Prague, Brno, Trinec, Usti nad Labem, Pilsen, University Hospital Olomouc, General Faculty Hospital, Prague, and Brno, Czech Republic*

Background Atrial fibrillation (AF), with a prevalence of 1% to 2%, is the most common cardiac arrhythmia. Without antithrombotic treatment, the annual risk of a cardioembolic event is 5% to 6%. The source of a cardioembolic event is a thrombus, which is usually formed in the left atrial appendage (LAA). Prevention of cardioembolic events involves treatment with anticoagulant drugs: either vitamin K antagonists or, recently, novel oral anticoagulants (NOAC). The other (nonpharmacologic) option for the prevention of a cardioembolic event involves interventional occlusion of the LAA.

Objective To determine whether percutaneous LAA occlusion is noninferior to treatment with NOAC in AF patients indicated for long-term systemic anticoagulation.

Study design The trial will be a prospective, multicenter, randomized noninferiority trial comparing 2 treatment strategies in moderate to high-risk AF patients (ie, patients with history of significant bleeding, or history of cardiovascular event(s), or a with $CHA_2DS_2VASc \geq 3$ and HAS-BLED score ≥ 2). Patients will be randomized into a percutaneous LAA occlusion (group A) or a NOAC treatment (group B) in a 1:1 ratio; the randomization was done using Web-based randomization software. A total of 396 study participants (198 patients in each group) will be enrolled in the study. The primary end point will be the occurrence of any of the following events within 24 months after randomization: stroke or transient ischemic attack (any type), systemic cardioembolic event, clinically significant bleeding, cardiovascular death, or a significant periprocedural or device-related complications.

Conclusion The PRAGUE-17 trial will determine if LAA occlusion is noninferior to treatment with NOAC in moderate- to high-risk AF patients. (Am Heart J 2017;183:108-14.)

PRAGUE - 18

ONE-YEAR OUTCOMES

PRASUGREL VS. TICAGRELOR IN AMI TREATED WITH PPCI

PRAGUE-18 STUDY

Zuzana Motovska, Petr Widimsky on behalf

of the PRAGUE-18 study investigators

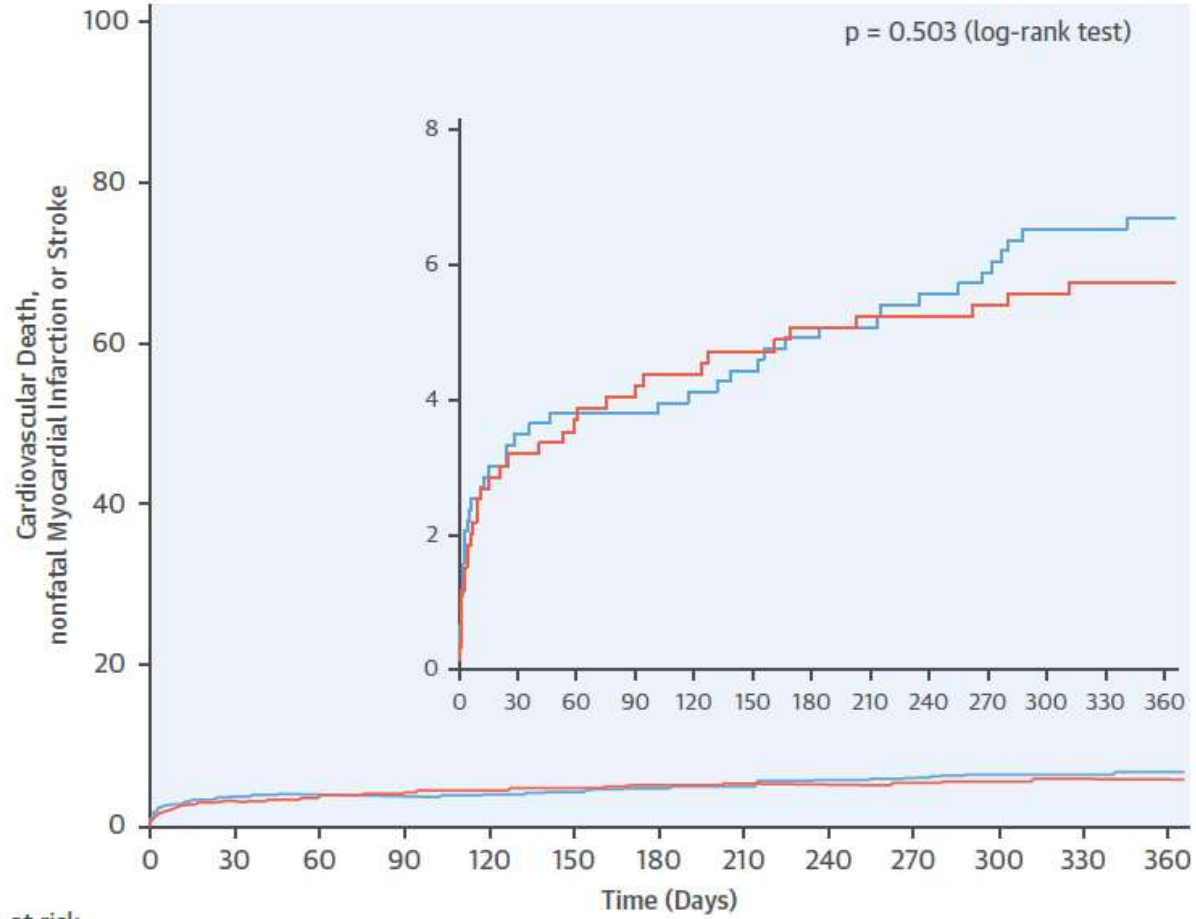
JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY VOL. 71, NO. 4, 2018

ORIGINAL INVESTIGATIONS

1-Year Outcomes of Patients Undergoing Primary Angioplasty for Myocardial Infarction Treated With Prasugrel Versus Ticagrelor

Zuzana Motovska, MD, PhD,[a] Ota Hlinomaz, MD, CSc,[b] Petr Kala, MD, PhD,[c] Milan Hromadka, MD, PhD,[d] Jiri Knot, MD, PhD,[a] Ivo Varvarovsky, MD, PhD,[e] Jaroslav Dusek, MD, PhD,[f] Jiri Jarkovsky, MSc, PhD,[g] Roman Miklik, MD, PhD,[c] Richard Rokyta, MD, PhD,[d] Frantisek Tousek, MD,[h] Petra Kramarikova, MGR,[b] Michal Svoboda, MSc,[g] Bohumil Majtan, MD,[i,j] Stanislav Simek, MD, CSc,[k] Marian Branny, MD, PhD,[l] Jan Mrozek, MD,[m] Pavel Cervinka, MD, PhD,[n] Jiri Ostransky, MD,[o] Petr Widimsky, MD, DrSc,[a]
PRAGUE-18 Study Group

CENTRAL ILLUSTRATION Comparison Between Prasugrel and Ticagrelor in AMI: Key Efficacy Endpoint



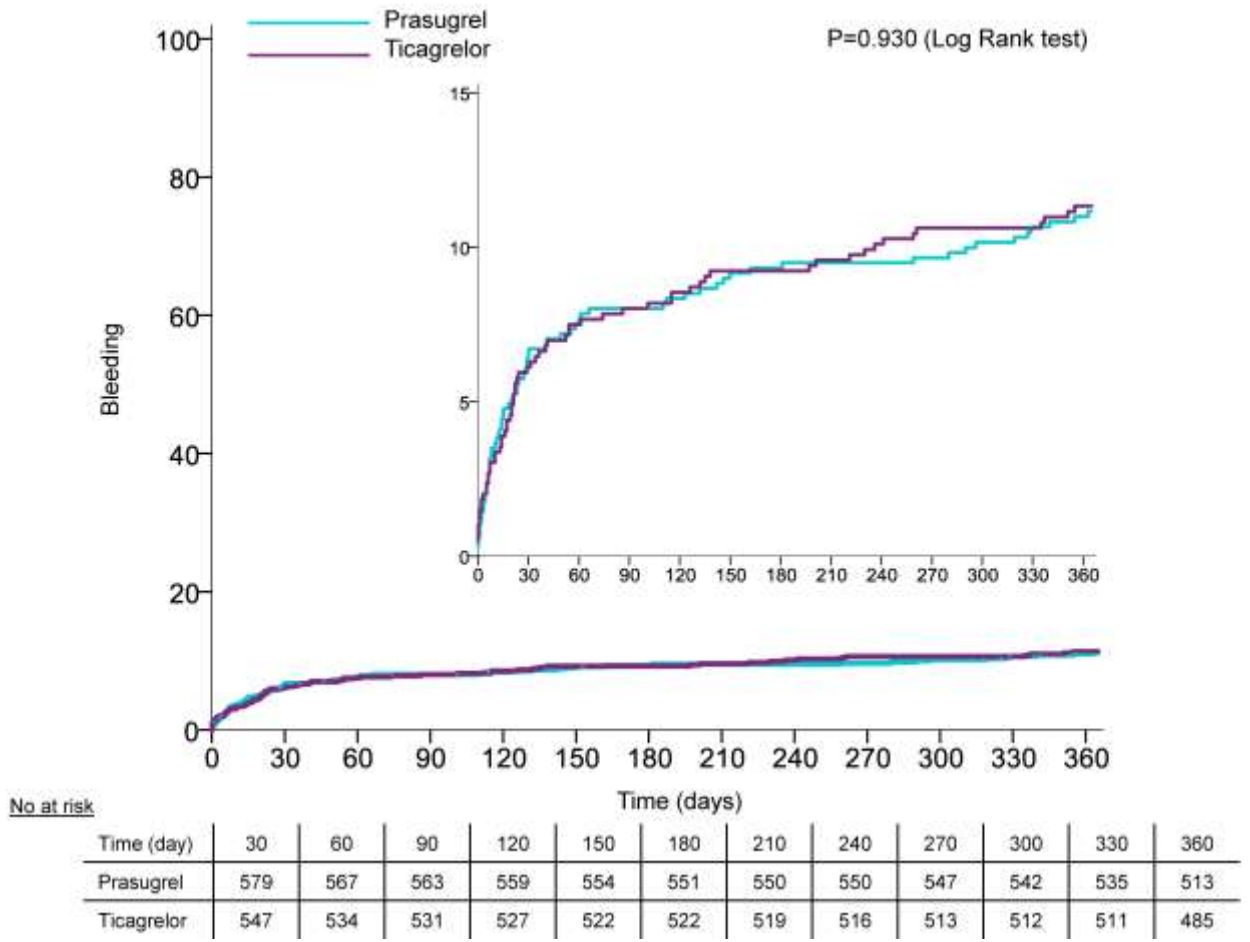
No. at risk

Time (day)	30	60	90	120	150	180	210	240	270	300	330	360
Prasugrel	608	603	602	599	596	593	592	589	586	580	576	550
Ticagrelor	575	568	565	562	559	557	556	556	555	554	552	530

Prasugrel — Ticagrelor

Motovska, Z. et al. J Am Coll Cardiol. 2018;71(4):371-81.

SAFETY



No at risk

Time (day)	30	60	90	120	150	180	210	240	270	300	330	360
Prasugrel	579	567	563	559	554	551	550	550	547	542	535	513
Ticagrelor	547	534	531	527	522	522	519	516	513	512	511	485

PRAGUE - 19

European Heart Journal (2014) **35**, 787–794
doi:10.1093/eurheartj/eht545

Bioresorbable vascular scaffolds in acute ST-segment elevation myocardial infarction: a prospective multicentre study 'Prague 19'

Viktor Kočka[1], Martin Malý[2], Petr Toušek[1], Tomas Buděšínský[1], Libor Lisa[1], Petko Prodanov[1], Jiri Jarkovský[3], and Petr Widimský[1]*

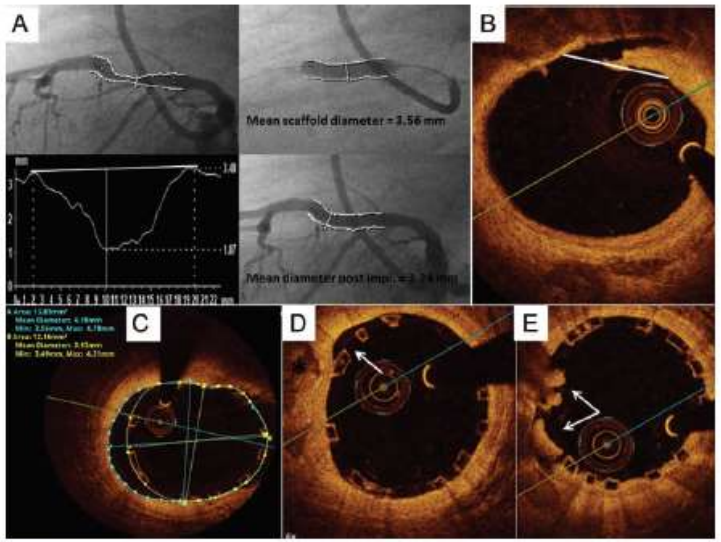


Figure 1 Quantitative coronary angiography and optical coherence tomography measurements. (*A*) Quantitative coronary angiography measurements before bioresorbable vascular scaffold implantation, during balloon inflation and immediately post-implantation. Acute elastic recoil 9%. (*B*) Edge dissection by OCT, the maximal length of dissection is compared with artery circumference. (*C*) Moderately large incomplete scaffold apposition due to large vessel calibre at proximal scaffold edge. (*D*) Small incomplete scaffold apposition most likely due to vessel calcification (asterisk). (*E*) Small protruding thrombi, excellent scaffold apposition.

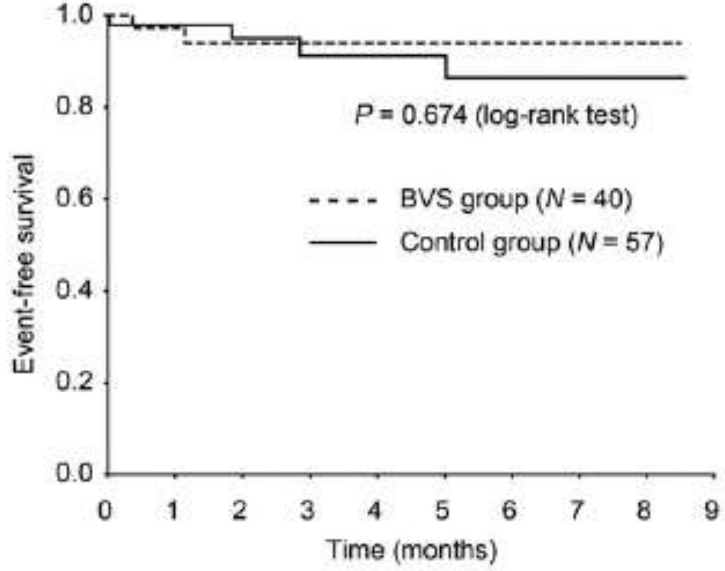


Figure 3 Kaplan–Meier event curves comparing bioresorbable vascular scaffold and Control group for a composite endpoint of cardiac death, any myocardial infarction, and target vessel revascularization. The number of patients available for follow-up in the bioresorbable vascular scaffold/Control group is 40/57 at discharge, 36/48 at 1 month, and 17/25 at 6 months.

EuroIntervention 2016;12:0-0

euro PCR 2016 LATE BREAKING TRIALS

Long-term follow-up after bioresorbable vascular scaffold implantation in STEMI patients: PRAGUE-19 study update

Petr Toušek[1], MD, PhD; Viktor Kočka[1]*, MD, PhD; Martin Malý[2], MD, PhD; Martin Kozel[1], MD; Robert Petr[1], MD; Martin Hajsl[2], MD; Jiří Jarkovský[3], MSc, PhD; Libor Lisa[1], MD; Tomáš Buděšínský[1], MD; Petr Widimský[1], MD, PhD

1. Cardiocenter, Third Faculty of Medicine, Charles University in Prague and University Hospital Kralovske Vinohrady, Prague, Czech Republic; 2. Department of Medicine, First Faculty of Medicine, Charles University in Prague and Central Military Hospital Prague, Prague, Czech Republic; 3. Institute of Biostatistics and Analyses, Faculty of Medicine, Masaryk University, Brno, Czech Republic

P. Toušek and V. Kočka have contributed equally to this manuscript.

FAKULTNI NEMOCNICE VINOHRADY

FACULTATIS MEDICAE TERTIAE UNIVERSITATIS CAROLINAE SIGILLUM

THANK YOU FOR YOUR ATTENTION

One-Year Clinical and Computed Tomography Angiographic Outcomes After Bioresorbable Vascular Scaffold Implantation During Primary Percutaneous Coronary Intervention for ST-Segment–Elevation Myocardial Infarction

The PRAGUE-19 Study

Petr Widimsky, MD, DrSc; Robert Petr, MD; Petr Tousek, MD, PhD; Martin Maly, MD, PhD; Hana Linkova, MD, PhD; Jiri Vrana, MD; Martin Hajsl, MD; Tomas Budesinsky, MD; Libor Lisa, MD; Viktor Kocka, MD, PhD

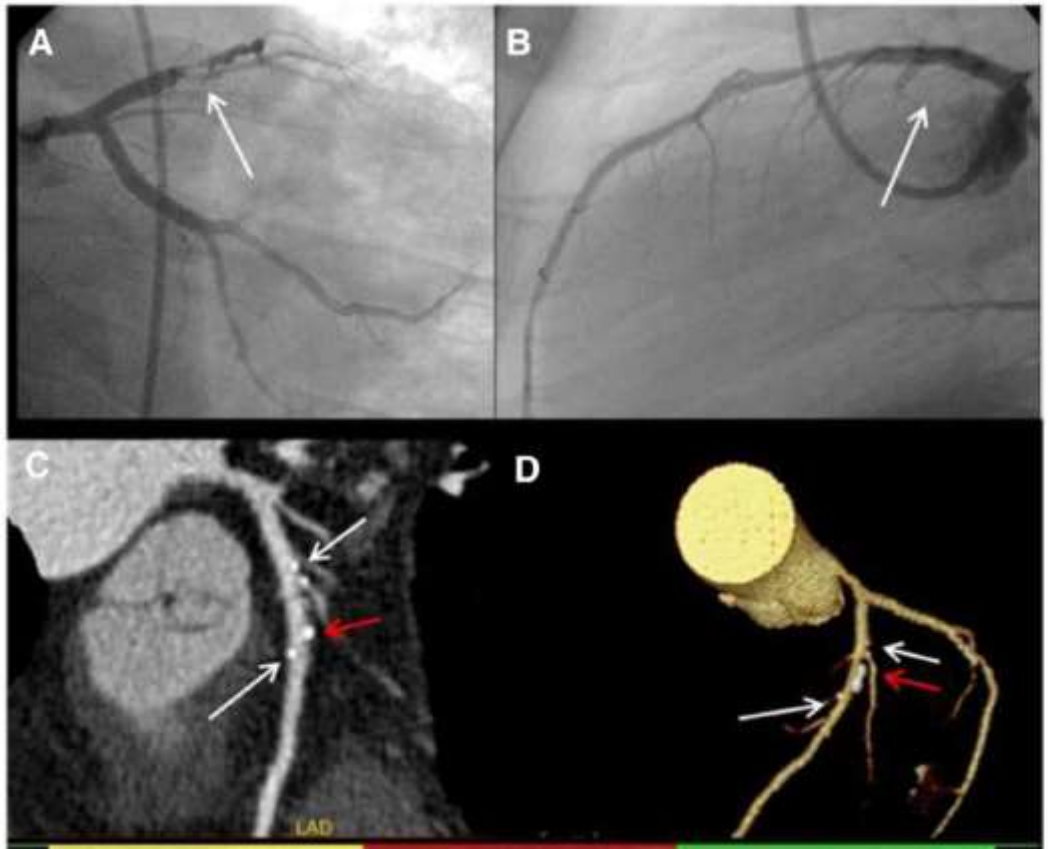


Table 4. In-Hospital and 12 Months Clinical Outcomes per Treatment Analysis (N=67)

Outcome	First Month	Months 2–12
Events definitely related to BVS		
In-stent restenosis (n)	0	1 (successfully treated by DEB)*
Events potentially related to BVS		
Definite stent thrombosis	1† (patient stopped all medications 13 days after pPCI, successfully treated by POBA)	0
Sudden death	0	1 (death at home)
Events definitely not related to BVS		
Death because of STEMI complication	1 (infarction septal rupture, died after emergent surgical repair)	0
Reinfarction in other vessel territory	0	2
Revascularization for recurrent angina, treated by PCI of de novo lesion	0	1

BVS indicates bioresorbable vascular scaffold; CT, computed tomography; DEB, drug eluting balloon; PCI, percutaneous coronary intervention; POBA, plain old balloon angioplasty; and STEMI, ST-segment–elevation myocardial infarction.

*This patient had BVS widely patent at 1 year CT angiographic analysis.

†This patient refused to come for CT angiographic control after 1 year, but is alive and well.

Ocenění související se studiemi PRAGUE


Dr LEE Jong-wook
Memorial Prize
for Public Health
2014
Czech Society of Cardiology
(Czech Republic)
We award this prize to
the Czech Society of Cardiology
which has made an outstanding
contribution to public health
May 2014
World Health Organization


ČESKÁ HLAVA


Gold Medals
Professor Petr Widimsky, MD., DrSc., FESC., FACC
Head of the Cardiocenter (departments of cardiology & cardiac surgery) and chair of its Cardiology Department at the Third Faculty of Medicine, Charles University & University Hospital „Kralovske Vinohrady", Prague, Czech Republic

Celkem 17x prezentace výsledků v nejprestižnějších sekcích světových kongresů (Hot Line / Late Breaking Clinical Trials)

- **1999 ESC: PRAGUE-1**
- **2000 ESC: VINO**
- **2002 ESC: PRAGUE-2 *(30-day outcomes)***
- **2002 ESC: PRAGUE-4 *(early surgical outcomes)***
- **2002 TCT: PRAGUE-2**
- **2004 ACC: PRAGUE-4 *(1-year CAG outcomes)***
- **2006 WCC: PRAGUE-2 *(5-yers f-u)***
- **2007 ESC: PRAGUE-8**
- **2009 ESC: PRAGUE-7**
- **2012 ESC: PRAGUE-12**
- **2013 ACC: PRAGUE-6**
- **2013 EuroPCR: PRAGUE-19**
- **2013 ESC: PRAGUE-14**
- **2015 ESH: PRAGUE-15**
- **2016 ESC: PRAGUE-18**
- **2016 ESC: PRAGUE-16**
- **2017 AHA: PRAGUE-18 (1-year outcomes)**

Víc těchto prezentací má jen tým prof. Braunwalda (Harvard, Boston)

Poděkování

VELKÝ DÍK VŠEM SPOLUAUTORŮM

Poděkování všem spolupracovníkům

Poděkování všem lékařům, sestrám i dalším pracovníkům – medicína je vždy týmová práce !

Jména lékařů pracujících v Kardiocentru v současnosti jsou uvedena tučně uvádíme i částečné úvazky.

III. interní-kardiologická klinika

MUDr. Adámková Monika
MUDr. Andrášová Andrea
MUDr. Balík Tomáš
MUDr. Bednář František, Ph.D.
MUDr. Bednářová Markéta
MUDr. Bírešová Monika
MUDr. Blechová Kamila
MUDr. Buděšínský Tomáš
MUDr. Bufka Václav
doc. MUDr. Bulvas Miroslav, CS
MUDr. Čapek Jan
MUDr. Černá Jana
MUDr. Černá Erika
doc. MUDr. Červinka Pavel, Ph.D.
MUDr. Čurila Karol, Ph.D.
MUDr. Daniel Jiří
MUDr. Dvořák Jaroslav
MUDr. Eichlerová Tereza
MUDr. Fischerová Michaela
MUDr. Fojt Richard
prof. MUDr. Gregor Pavel, DrSc.
MUDr. Hachová Alice
MUDr. Hálová Lenka
MUDr. Herold Martin
MUDr. Heřman Dalibor, Ph.D.
MUDr. Hes Ivan, CSc.
MUDr. Hesová Kateřina,
MUDr. Hloušková Kristýna
MUDr. Honěk Jakub
MUDr. Hrabáková Hana
MUDr. Hrdlička Stanislav
MUDr. Illinger Vojtěch
MUDr. Ilušáková Lenka
MUDr. Indruch Tomáš
MUDr. Indruchová Petra
MUDr. Jadvišová Zuzana
MUDr. Jarkovský Patrik
MUDr. Jirešová Eva
MUDr. Jirmář Radovan, Ph.D.
MUDr. Kameník Martin
MUDr. Karásek Jiří
MUDr. Karel Ivan
MUDr. Kitanovičová Andrea
MUDr. Kríšková Lucia
MUDr. Knot Jiří, Ph.D.
MUDr. Kociánová Iva
MUDr. Kočka Viktor, Ph.D.
MUDr. Kohout Pavel
MUDr. Kohutová Andrea
MUDr. Kolouch Tomáš
MUDr. Koutná Stanislava
MUDr. Kozel Martin
MUDr. Kožnar Boris, Ph.D.
MUDr. Králík Robin
MUDr. Kropáček Petr
MUDr. Kroupa Josef
MUDr. Krupička Jiří, Ph.D.
MUDr. Krutský Michal
MUDr. Lačňák Zdeněk
MUDr. Lindovský Petr
MUDr. Línková Hana, Ph.D.
MUDr. Lisa Libor
MUDr. Lorenzová Alena, Ph.D.
MUDr. Loučková Anna
MUDr. Lukavec Jiří
MUDr. Málek Filip
doc. MUDr. Málková Jana, CSc.
MUDr. Marešová Irena
MUDr. Matušínská Ludmila
MUDr. Mikšík Lukáš
MUDr. Mocová Danuše, Ph.D.
MUDr. Morawska Petra
doc. MUDr. Moťovská Zuzana, Ph.
MUDr. Mourek Jindřich
MUDr. Nováková Jitka
MUDr. Nováková Martina
MUDr. Ondráková Martina
doc. MUDr. Osmančík Pavel, Ph.D
doc. MUDr. Ošťádal Petr, Ph.D.
MUDr. Parreira Cruz Coucelo
MUDr. Pašková Eva
MUDr. Paulů Petra, Ph.D.
MUDr. Pávková Leona
doc. MUDr. Pěnička Martin, Ph.D.
MUDr. Peroutka Zdeněk
MUDr. Petr Robert
MUDr. Podzimková Jana
MUDr. Polášek Rostislav
MUDr. Povolný Jan
MUDr. Prodanov Petko Petrov
MUDr. Pros Zdeněk
MUDr. Roháč Filip
MUDr. Rýzlová Michaela
MUDr. Salomonová Klára
MUDr. Simonides Jan
MUDr. Sklenář Lubomír
MUDr. Sládková Tamara
MUDr. Sommerová Zuzana, Ph.D.
MUDr. Sousedíková Alena
MUDr. Sova Zdeněk
MUDr. Srncová Lucie
MUDr. Stádníková Lucie
MUDr. Staněk František, CSc.
MUDr. Stanka Pavel
MUDr. Stelmach Zdenko
MUDr. Strnadel Matěj,
MUDr. Suková Jana,
MUDr. Sulženko Jakub
MUDr. Šejbová Marta
doc. MUDr. Špaček Rudolf, CSc.
MUDr. Štellová Blanka
MUDr. Štěpánková Lenka
MUDr. Štros Petr
MUDr. Štverka Petr
MUDr. Šubrtová Michaela
MUDr. Taherzadeh Amir
MUDr. Teringová Elena
doc. MUDr. Toušek Petr, Ph.D.
MUDr. Ulman Jaroslav
MUDr. Vavrová Jana
MUDr. Vichová Teodora
MUDr. Vondrák Karel
MUDr. Voráč David
prof. MUDr. Widimský Petr, Dr
MUDr. Zenáhlíková Michaela

Kardiochirurgická klinika

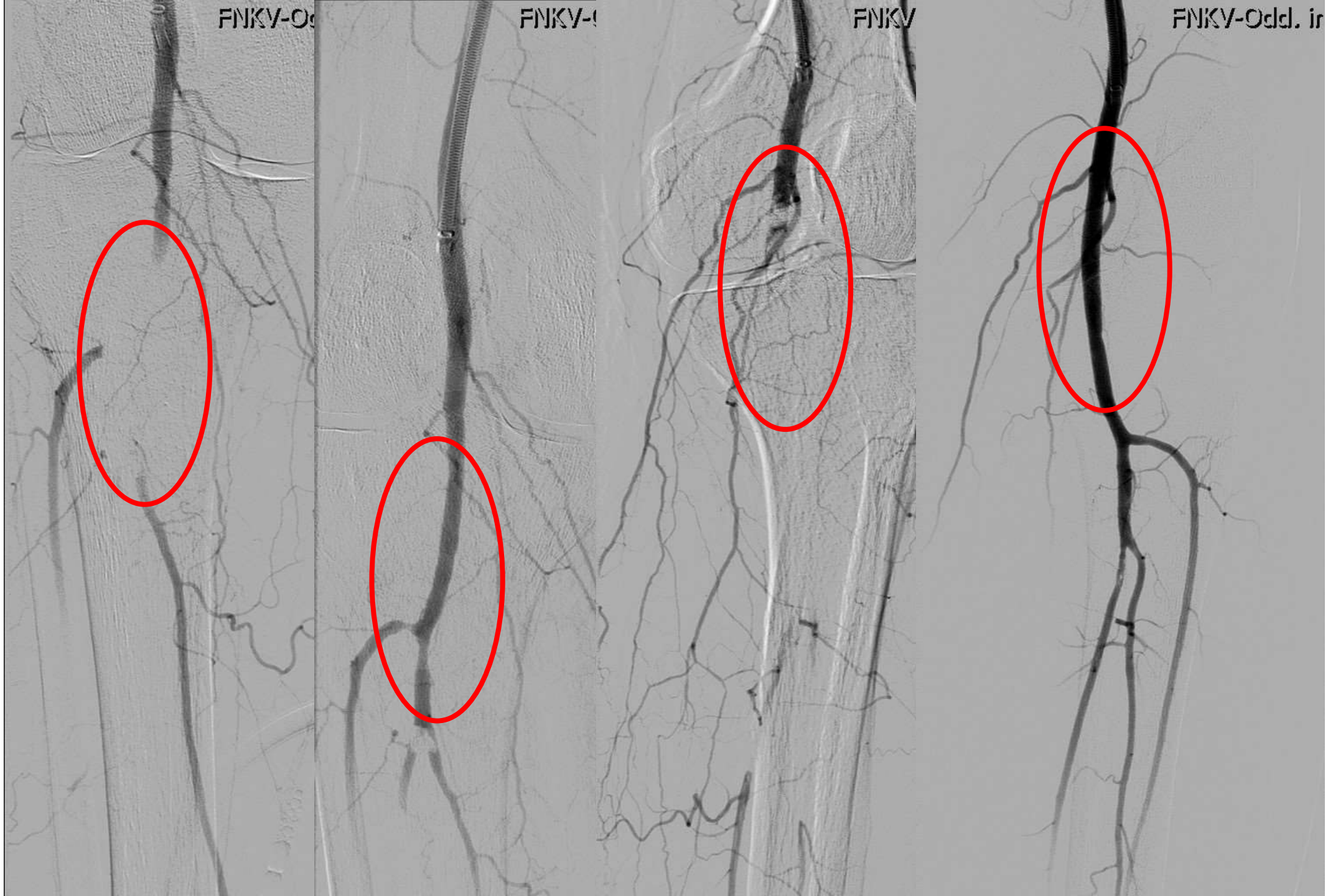
MUDr. Abrman Kristián
MUDr. Bednář František, Ph.D.
MUDr. Benešová Miroslava
MUDr. Bílek Jan
MUDr. Borisov Todor Petrov.
MUDr. Bouguedoura Faycal
MUDr. Brůček Petr
MUDr. Budera Petr, Ph.D.
MUDr. Bukovská Zuzana
MUDr. Bukovský Petr
RNDr. MUDr. Červinková Monik
MUDr. David Martin
MUDr. Fajt Richard
MUDr. Fojt Richard
MUDr. Hájek Tomáš
MUDr. Hlavička Jan
MUDr. Hrabák Jakub
MUDr. Hrdina Josef
MUDr. Jareš Martin
MUDr. Jehlička Pavel
MUDr. Jelínek Štěpán
MUDr. Jirásek Karel
MUDr. Kolesár Miroslav
MUDr. Kolouch Petr
MUDr. Králová Sabina
MUDr. Kraupnerová Anna
MUDr. Kroupa Michal
MUDr. Kubátová Jana
MUDr. Leško Robert
MUDr. Lukáč Peter
MUDr. Macháč Martin
MUDr. Majid Marian
MUDr. Martínková Jindřiška
MUDr. Nambanca Luis
MUDr. Nejedlý Michal
MUDr. Pazderková Petra
MUDr. Petr Michal
MUDr. Polák Petr
MUDr. Popelka Pavel
MUDr. Provazník Zdeněk
MUDr. Pugner Karel
MUDr. Rizov Vitalit
MUDr. Růžička Oldřich
MUDr. Smitka Kvido
prof. MUDr. Straka Zbyněk, CSc.
MUDr. Svobodová Eva
MUDr. Šenkýřová Štěpánka
MUDr. Šídlová Cecílie
MUDr. Škorpil Jiří
MUDr. Šnircová Jana
MUDr. Špegár Ján
MUDr. Štefka Jakub
MUDr. Talavera David
MUDr. Ticháček Dalibor
MUDr. Trávníček
MUDr. Tůma V1
MUDr. Urban M
prof. MUDr. Va
MUDr. Voráč D
MUDr. Votava
MUDr. Votava Ja
MUDr. Vymazal
MUDr. Záruba M
MUDr. Zeman M
MUDr. Zenáhli

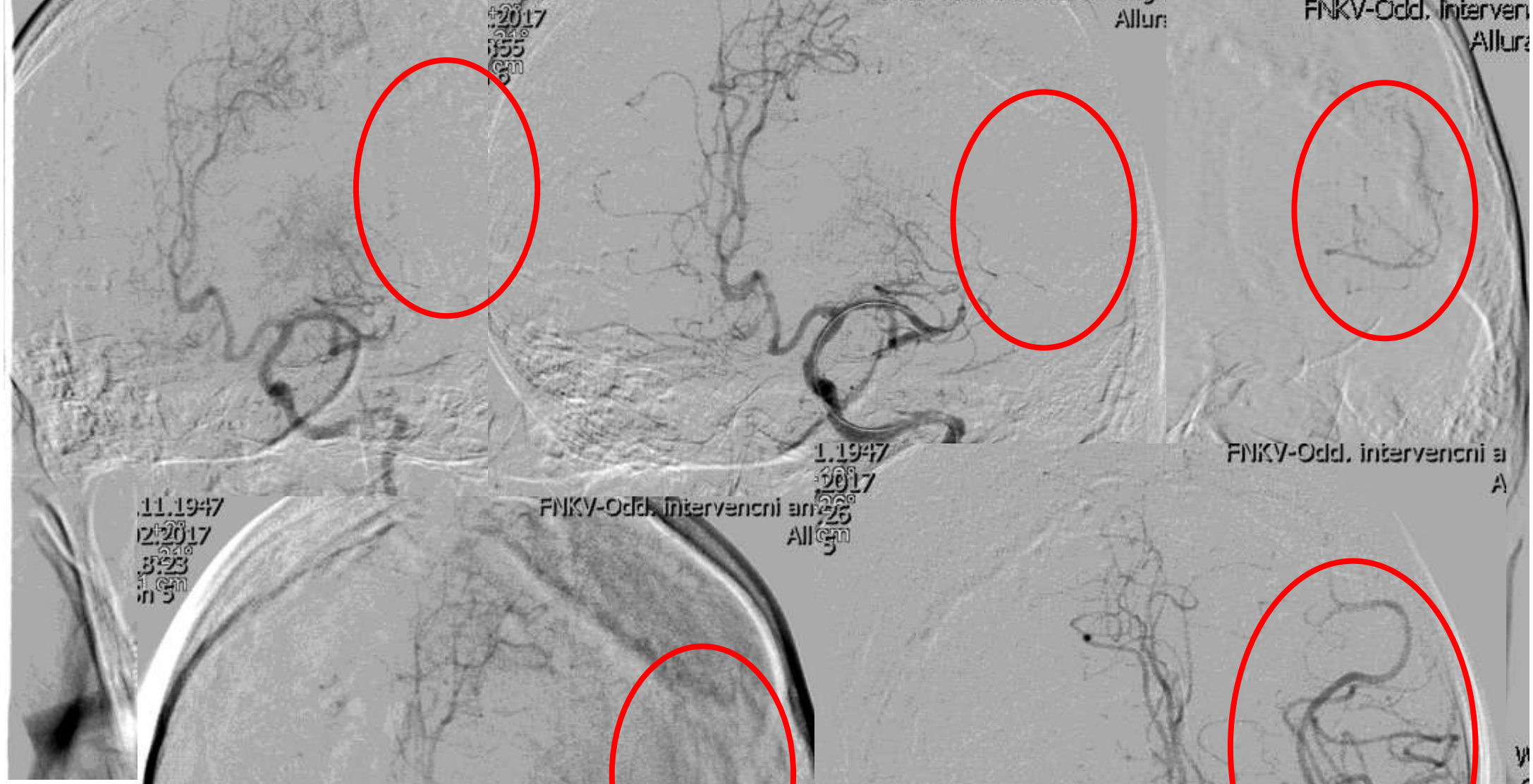
THANKS TO ALL STUDY INVESTIGATORS!

Cardiocentre, Third Medical Faculty of Charles Univ. and Univ. Hospital Kralovske Vinohrady, Prague: Zuzana Motovska, Petr Widimsky, Jiri Knot, Jaroslav Ulman, Frantisek Bednar, Martin Kamenik, Petra Paulů, Dana Bilkova, Teodora Vichova, Robin Kralik, Karel Vondrak, Vaclav Bufka, Pavel Osmancik, Dalibor Herman, Petr Stros, Karol Curila, Petr Tousek, Tomas Budesinsky. **First Department of Cardioangiology, ICRC, Faculty of Medicine, Masaryk Univ. and St. Anne's Univ. Hospital, Brno**: Ota Hlinomaz, Petra Kramariková, Marketa Beranová, Ladislav Groch, Jan Sitar, Michal Rezek, Jiří Seménka, Martin Novák, Jiří Sikora, Blanka Fischerová, **Department of Internal Medicine and Cardiology, Faculty of Medicine Masaryk Univ. and Univ. Hospital Brno**: Petr Kala, Roman Miklík , Lumir Koc, Petr Jerabek, Otakar Bocek, Roman Stipal, Jan Kanovsky, Martin Poloczek, Robert Cyprian**. Department of Cardiology, Univ. Hospital and Faculty of Medicine in Pilsen:** Milan Hromadka, Richard Rokyta, Jan Pospisil MD. **Cardiology Centre AGEL, Pardubice**: Ivo Varvarovsky, Martin Pavolko, Martin Ráchela, Jan Málek, Vladimir Rozsíval, Vojtěch Novotný, Tomáš Lazarák, Jan Matějka. **First Department of Internal Medicine, Univ. Hospital Hradec Kralove**: Jaroslav Dusek, Jan Hulka, Josef Stasek. **Cardiocenter, Regional Hospital, Ceske Budejovice**: Frantisek Tousek, Ladislav Pesl, Ales Kovarik, Dita Novakova, Martina Zitova, Milan Slapnicka, Radek Krejcí, Tomas Romsauer, Tomas Sattran. **Cardiocenter, Regional Hospital, Karlovy Vary**: Bohumil Majtan, Michal Padour, Alexandr Schee, Roman Ondrejcak, Zdenek Peroutka. **Department of Cardiovascular Medicine, First Faculty of Medicine, Charles Univ. and General Univ. Hospital in Prague**: Stanislav Simek, Jan Belohlavek . **AGEL Research and Training Institue - Trinec Branch, Cardiovascular Centre, Podlesi Hospital**: Marian Branny, Alexandra Vodzinska, Jindrich Cerny, Jan Indrak, Miroslav Hudec, Michal Palowski, Radim Spacek , Daniel Matous. **Cardiovascular Department, Univ. Hospital Ostrava**: Jan Mrozek, Martin Porzer, Pavel Kukla. **Department of Cardiology, Masaryk Hospital and UJEP, Usti nad Labem**: Pavel Cervinka, Andrej Kupec, Marian Bystron. **First internal cardiology clinic, Univ. Hospital Olomouc:** Jiri Ostransky, Martin Sluka. Cardiocenter, Hospital na Homolce: Martin Mates, Bohumil Majtan, Pavel Formanek, Petr Kmonicek, Karel Kopriva, Ondrej Aschermann.

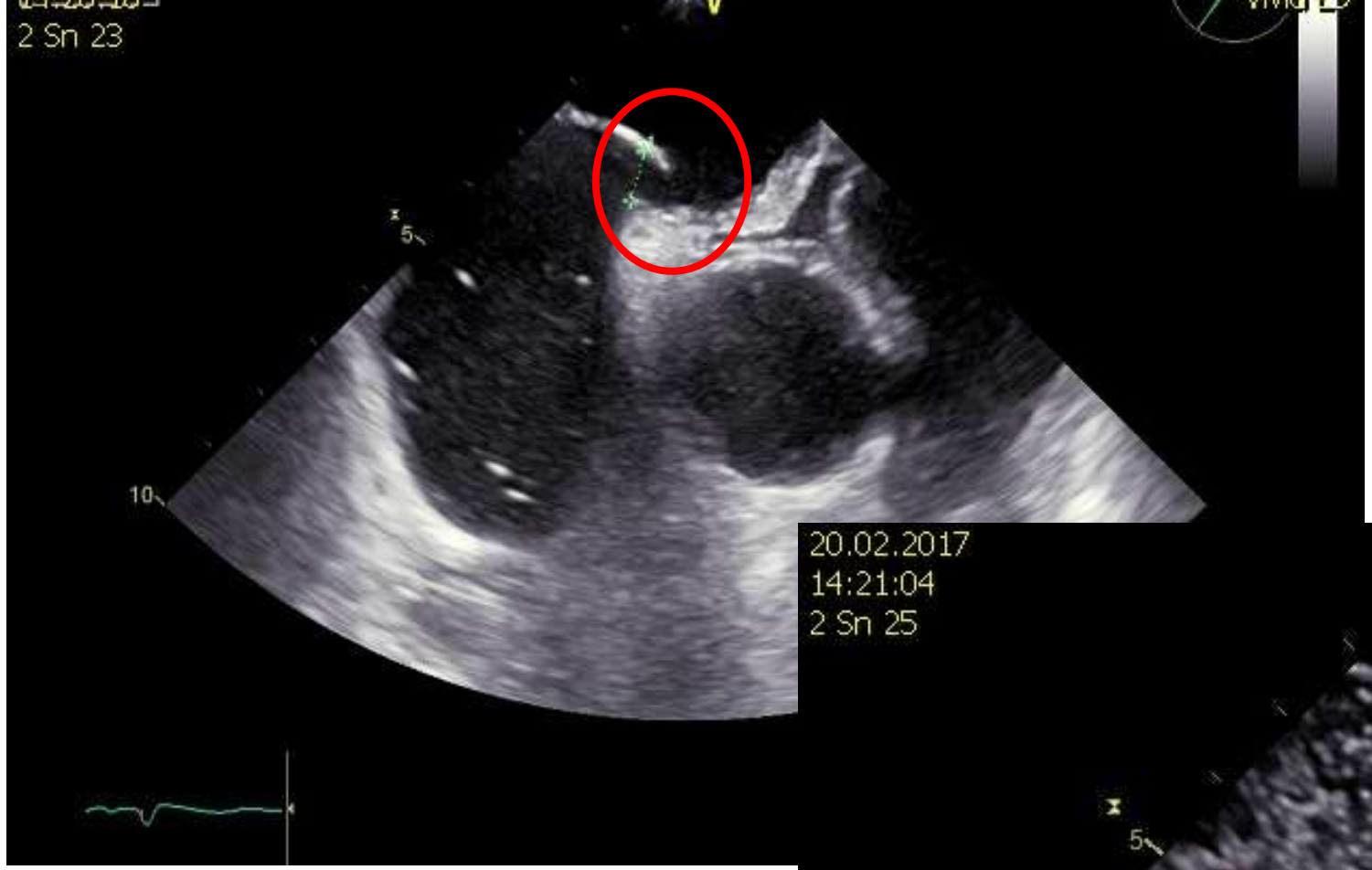
Kasuistika na závěr

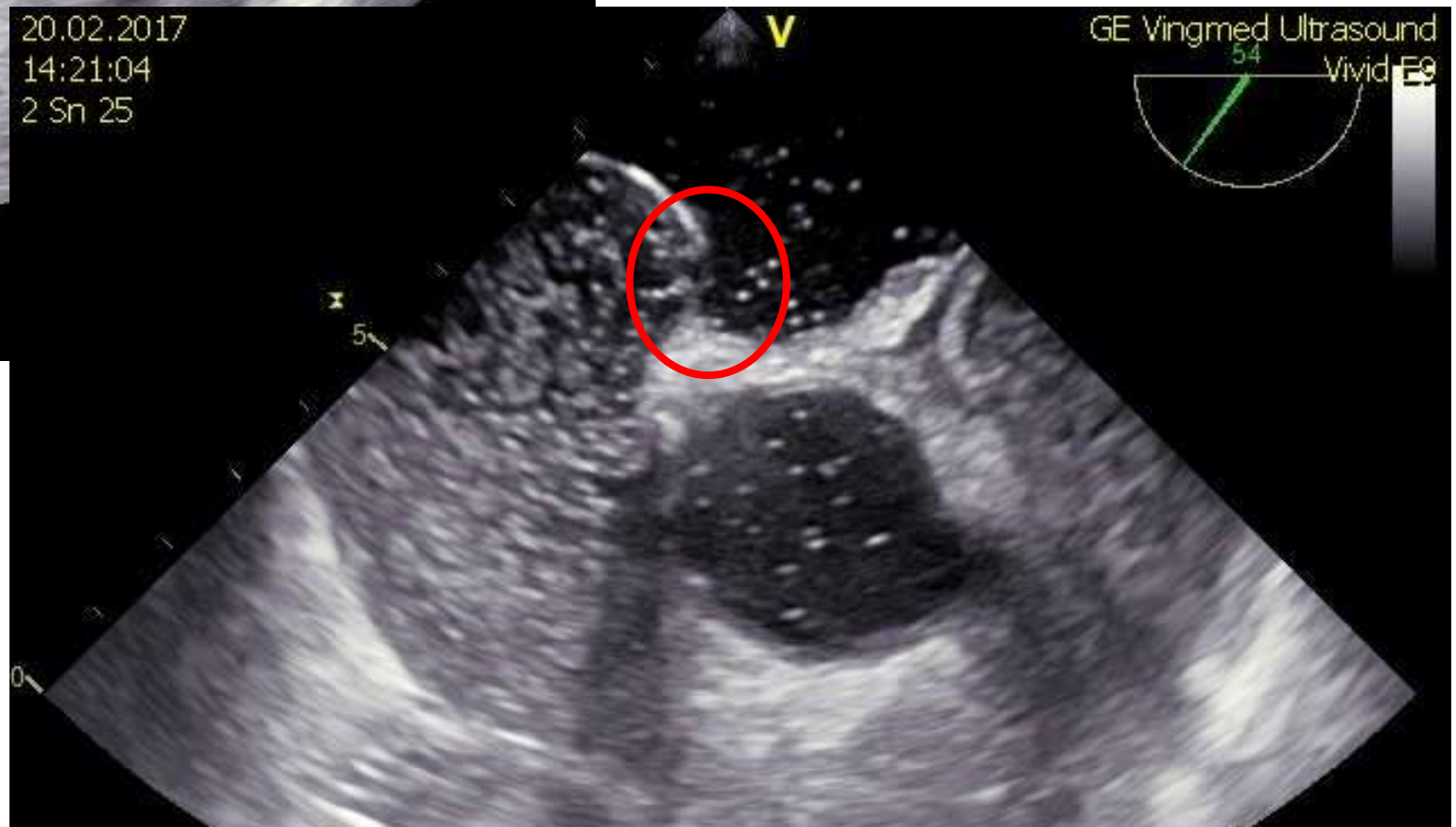
(Únor 2017)

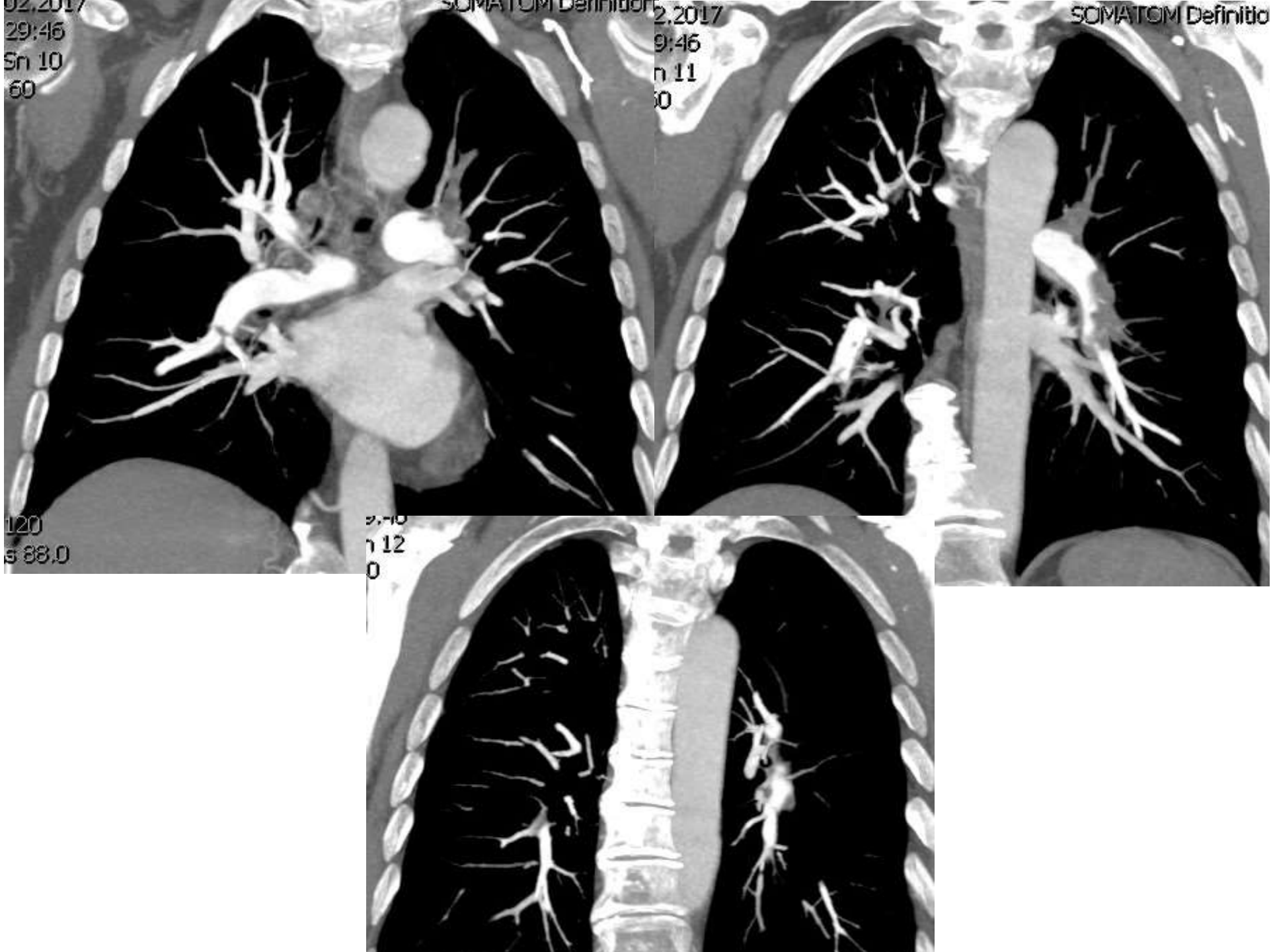

FNKV-Odd. ir

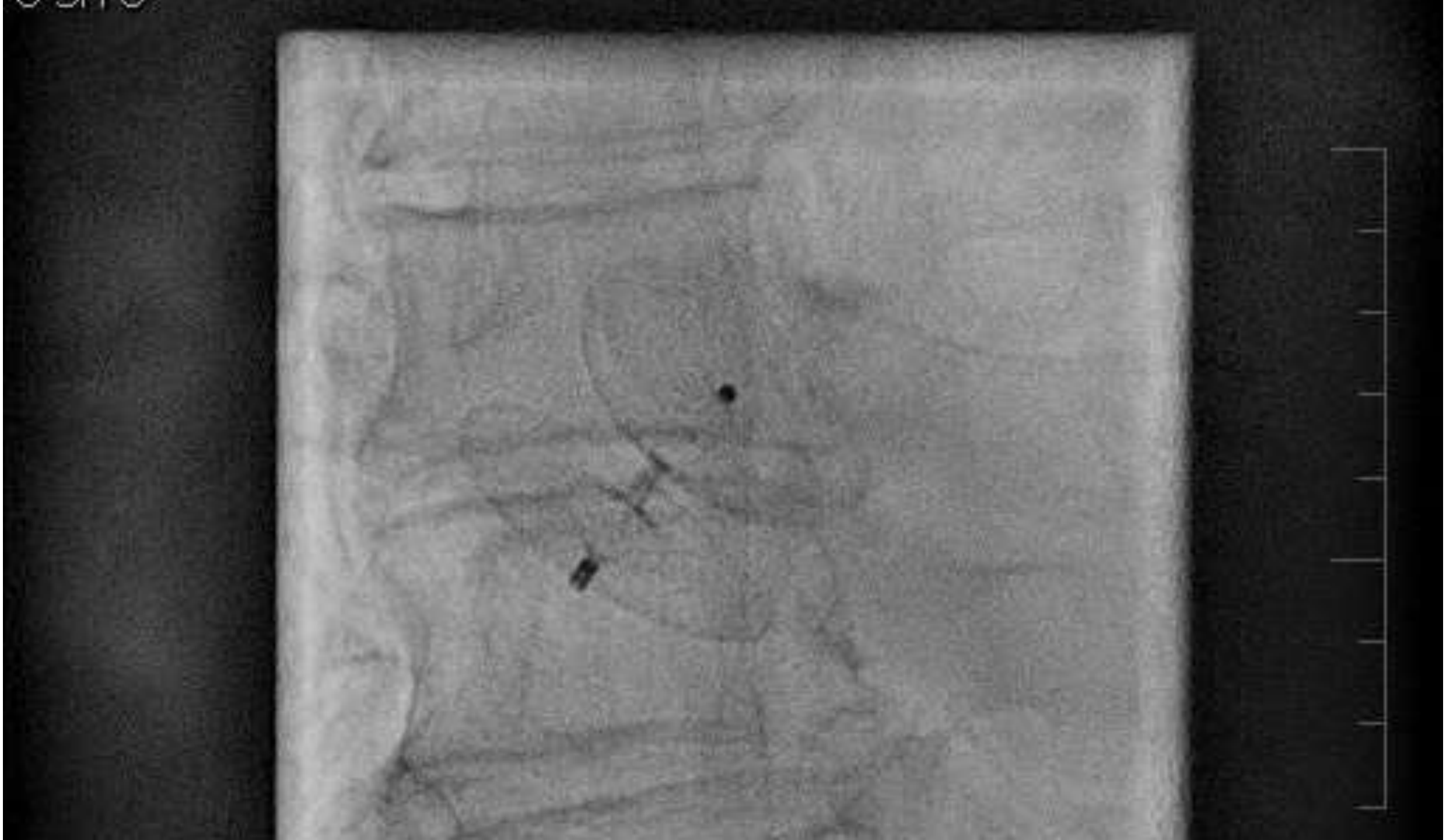


O 32 hodin později náhle těžký iktus


2 Sn 23
5
10

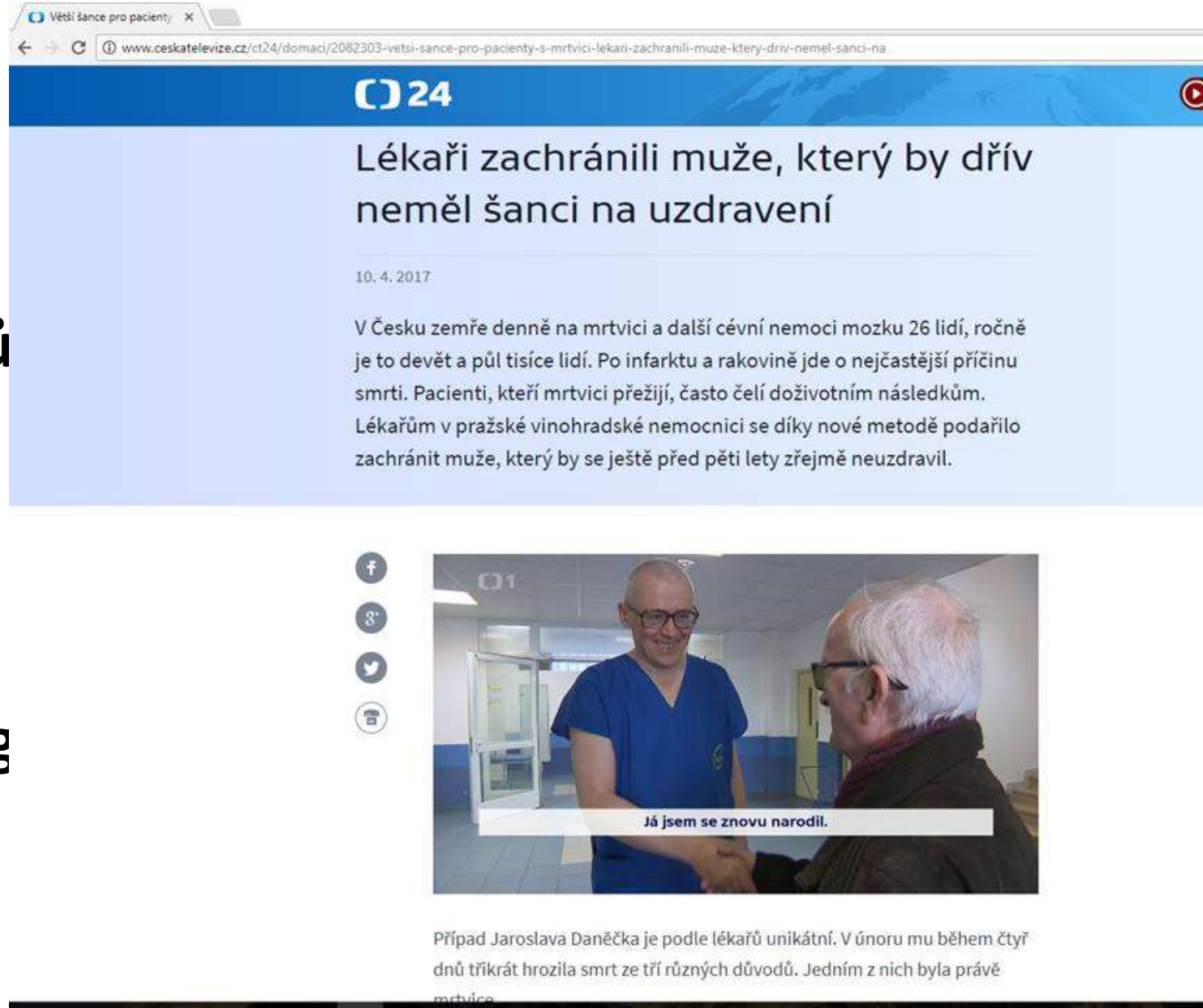

20.02.2017
14:21:04
2 Sn 25
GE Vingmed Ultrasound
Vivid
5
0


SOMATOM Definitio



Výsledek léčby

- **Propuštěn domů 7.den**
- **Úplná normalizace jak neurologických funkcí tak i perfuze DK, vymizení trombů v plícnici**
- **Antithrombotická léčba: apixaban 2x2.5 mg plus clopidogrel 75 mg po 3 měsíce, pak apixaban 2x5 mg dlouhodobě**



Medicína je nejkrásnější povolání

Kardiologie je královna medicíny

Intervenční kardiologie je královna kardiologie