



Effekten av endovaskulær behandling (angioplastikk/stenting) av carotisstenose etter TIA og/eller hjerneslag sammenlignet med carotid endarterektomi?

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Kommentar: Søk etter systematiske oversikter og RCT-er.
Tidsbruk: 37 timer

Referanser i EndNote:

SR med dubletter: 600
 SR uten dubletter: 417
 RCT med dubletter: 1219
 RCT uten dubletter: 737

Pico-skjema:

Hva handler spørsmålet om?	Spørsmålet i PICO format			
	Populasjon (pasient)	Intervensjon (tiltak)	Comparison (sammenligning/kontroll)	Outcome(s) (utfall/effekt)
Hva er effekten av endovaskulær behandling (angioplastikk/stenting) av carotisstenose etter TIA og/eller hjerneslag sammenlignet med carotid endarterektomi?	Pasienter med symptomatisk carotisstenose (hjerneslag og/eller TIA)	Endovaskulær behandling (angioplastikk/stenting)	Endarterektomi (åpen kirurgi)	Hjerneslag (alle, iskemiske, ipsilaterale), død, funksjonshemming (disability)

Database: Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present
Dato: 16.10.2015
Antall treff: 567 total (341 SR og 361 RCT)

#	Searches	Results
1	stroke/	68851
2	cerebral infarction/	19999
3	"intracranial embolism and thrombosis"/	8770
4	intracranial embolism/	3137
5	stroke*.tw.	171668
6	((brain* or cerebr* or hemispher* or supratentorial or MCA or anterior circulation or basal ganglia) adj5 (infarct* or thrombo* or emboli*)).tw.	37559



7	Ischemic Attack, Transient/	18637
8	((transient adj3 isch?emi\$) or TIA or TIAs).tw.	22127
9	carotid artery diseases/	19100
10	carotid artery, internal, dissection/	1098
11	carotid artery thrombosis/	2980
12	carotid stenosis/	13101
13	moyamoya disease/	2410
14	brain infarction/	3546
15	(carotid arteries/ or carotid artery, common/ or carotid artery, internal/) and constriction, pathologic/	877
16	(carotid adj5 (stenosis or thrombo* or disease* or narrow* or plaque* or arterioscler* or atheroscler*)).tw.	22446
17	or/1-16	267533
18	Stents/	52736
19	angioplasty/	6044
20	angioplasty, balloon/	15832
21	angioplasty, balloon, laser-assisted/	352
22	angioplasty, laser/	635
23	atherectomy/	572
24	(angioplast* or stent*).tw.	98798
25	(balloon adj5 (dilat* or catheter*)).tw.	14890
26	or/18-25	123647
27	endarterectomy/	6260
28	endarterectomy, carotid/	7373
29	exp Carotid Artery Diseases/su	11910
30	exp Carotid Arteries/su	9061
31	endarterectom*.tw.	12268
32	or/27-31	27189
33	17 and 26 and 32	4235



34	((systematic* or literature) adj2 review*).mp.	178334
35	(metaanalys* or meta analys*).mp. or (meta analysis or review).pt.	2123025
36	or/34-35	2180908
37	33 and 36	941
38	limit 37 to yr="2010 -Current"	341
39	randomized controlled trial.pt. or randomi#ed.mp. or placebo.mp.	707745
40	33 and 39	878
41	limit 40 to yr="2010 -Current"	361
42	38 or 41	567

Database: Embase 1974 to 2015 October 15
Dato: 16.10.2015
Antall treff: 701 total (138 SR og 649 RCT)

#	Searches	Results
1	cerebrovascular accident/	110912
2	brain infarction/	39955
3	thromboembolism/	57294
4	arterial thromboembolism/	697
5	artery embolism/	3399
6	brain embolism/	5861
7	artery thrombosis/	14065
8	stent thrombosis/	10714
9	brain embolism/	5861
10	occlusive cerebrovascular disease/	7697
11	stroke*.tw.	252059
12	((brain* or cerebr* or hemispher* or supratentorial or MCA or anterior circulation or basal ganglia) adj5 (infarct* or thrombo* or emboli*)).tw.	51632
13	transient ischemic attack/	27857
14	((transient adj3 isch?emi\$) or TIA or TIAs).tw.	31962



15	carotid artery disease/	10360
16	carotid artery injury/	3549
17	carotid artery thrombosis/	2605
18	carotid artery obstruction/	21769
19	moyamoya disease/	4143
20	(carotid artery/ or common carotid artery/ or internal carotid artery/) and ("stenosis, occlusion and obstruction"/ or obstruction/ or exp stenosis/)	4559
21	(carotid adj5 (stenosis or thrombo* or disease* or narrow* or plaque* or arterioscler* or atheroscler*)).tw.	31919
22	or/1-21	459193
23	stent/	72665
24	angioplasty/	19705
25	carotid angioplasty/	453
26	carotid artery stenting/	3871
27	percutaneous transluminal angioplasty/	24246
28	laser angioplasty/	893
29	atherectomy/	3163
30	balloon dilatation/	13951
31	(angioplast* or stent*).tw.	146219
32	(balloon adj5 (dilat* or catheter*)).tw.	21064
33	or/23-32	187674
34	endarterectomy/	7523
35	carotid endarterectomy/	14383
36	carotid artery disease/su [Surgery]	2524
37	carotid artery/su [Surgery]	1461
38	endarterectom*.tw.	15953
39	or/34-38	26108
40	22 and 33 and 39	5114
41	meta analysis/ or "systematic review"/ or ((systematic* adj2 review*) or metaanalys* or meta	219955



	analys*).tw.	
42	40 and 41	257
43	limit 42 to yr="2010 -Current"	138
44	randomized controlled trial/ or randomi#ed.mp. or placebo.mp.	955171
45	40 and 44	1210
46	limit 45 to yr="2010 -Current"	649
47	43 or 46	701

Database: The Cochrane Library (Cochrane Database of Systematic Reviews: Issue 10 of 12, October 2015; Database of Abstracts of Reviews of Effect: Issue 2 of 4, April 2015; Cochrane Central Register of Controlled Trials: Issue 9 of 12, September 2015; Health Technology Assessment Database: Issue 3 of 4, July 2015)

Dato: 16.10.2015

Antall treff: 153 total (25 SR og 128 RCT)

ID	Search	Hits
#1	MeSH descriptor: [Stroke] this term only	5055
#2	MeSH descriptor: [Cerebral Infarction] this term only	510
#3	MeSH descriptor: [Intracranial Embolism and Thrombosis] this term only	84
#4	MeSH descriptor: [Intracranial Embolism] this term only	115
#5	stroke*:ti,ab,kw	27532
#6	((brain* or cerebr* or hemispher* or supratentorial or MCA or anterior next circulation or basal next ganglia) near/5 (infarct* or thrombo* or emboli*)):ti,ab,kw	3810
#7	MeSH descriptor: [Ischemic Attack, Transient] this term only	557
#8	((transient near/3 isch*?emi*) or TIA or TIAs):ti,ab,kw	899
#9	MeSH descriptor: [Carotid Artery Diseases] this term only	400
#10	MeSH descriptor: [Carotid Artery, Internal, Dissection] this term only	5
#11	MeSH descriptor: [Carotid Artery Thrombosis] this term only	18
#12	MeSH descriptor: [Carotid Stenosis] this term only	617
#13	MeSH descriptor: [Moyamoya Disease] this term only	8
#14	MeSH descriptor: [Brain Infarction] this term only	53
#15	MeSH descriptor: [Carotid Arteries] this term only	628
#16	MeSH descriptor: [Carotid Artery, Common] this term only	187
#17	MeSH descriptor: [Carotid Artery, Internal] this term only	194



#18	#15 or #16 or #17	976
#19	MeSH descriptor: [Constriction, Pathologic] this term only	372
#20	#18 and #19	7
#21	(carotid near/5 (stenosis or thrombo* or disease* or narrow* or plaque* or arterioscler* or atheroscler*)):ti,ab,kw	2095
#22	{or #1-#14} or {or #20-#21}	31758
#23	MeSH descriptor: [Stents] this term only	3040
#24	MeSH descriptor: [Angioplasty] this term only	336
#25	MeSH descriptor: [Angioplasty, Balloon] this term only	594
#26	MeSH descriptor: [Angioplasty, Balloon, Laser-Assisted] this term only	31
#27	MeSH descriptor: [Angioplasty, Laser] this term only	31
#28	MeSH descriptor: [Atherectomy] this term only	33
#29	(angioplast* or stent*):ti,ab,kw	11538
#30	(balloon near/5 (dilat* or catheter*)):ti,ab,kw	1132
#31	{or #23-#30}	12235
#32	MeSH descriptor: [Endarterectomy] this term only	118
#33	MeSH descriptor: [Endarterectomy, Carotid] this term only	509
#34	MeSH descriptor: [Carotid Artery Diseases] this term only and with qualifier(s): [Surgery - SU]	80
#35	MeSH descriptor: [Carotid Arteries] this term only and with qualifier(s): [Surgery - SU]	66
#36	endarterectom*:ti,ab,kw	1318
#37	{or #32-#36}	1357
#38	#22 and #31 and #37 Publication Year from 2010 to 2015	161

Database: Cinahl via Ebsco
Dato: 16.10.2015
Antall treff: 81 total (37 SR og 59 RCT)

#	Query	Results
S1	(MH "Stroke")	35,211
S2	(MH "Intracranial Embolism and Thrombosis")	866
S3	(MH "Intracranial Embolism")	182
S4	(MH "Stroke Patients")	2,461
S5	TI stroke* OR AB stroke*	39,301



S6	TI ((brain* or cerebr* or hemispher* or supratentorial or MCA or anterior circulation or basal ganglia) N5 (infarct* or thrombo* or emboli*))) OR AB ((brain* or cerebr* or hemispher* or supratentorial or MCA or anterior circulation or basal ganglia) N5 (infarct* or thrombo* or emboli*)))	3,747
S7	(MH "Cerebral Ischemia, Transient")	2,486
S8	TI (((transient N3 (ischemi* or ischaemi*)) or TIA or TIAs)) OR AB (((transient N3 ischemi* or ischaemi*) or TIA or TIAs))	4,909
S9	TI (((transient N3 (ischemi* or ischaemi*)) or TIA or TIAs)) OR AB (((transient N3 ischemi* or ischaemi*) or TIA or TIAs))	4,909
S10	(MH "Carotid Artery Diseases")	1,543
S11	(MH "Carotid Artery Dissections")	237
S12	(MH "Carotid Artery Thrombosis")	45
S13	(MH "Carotid Stenosis")	1,581
S14	(MH "Moyamoya Disease")	134
S15	(MH "Carotid Arteries") AND (MH "Constriction, Pathologic")	72
S16	TI ((carotid N5 (stenosis or thrombo* or disease* or narrow* or plaque* or arterioscler* or atheroscler*))) OR AB ((carotid N5 (stenosis or thrombo* or disease* or narrow* or plaque* or arterioscler* or atheroscler*)))	2,505
S17	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16	56,192
S18	(MH "Stents")	6,976
S19	(MH "Angioplasty")	1,184
S20	(MH "Angioplasty, Laser")	62
S21	(MH "Angioplasty, Balloon, Laser-Assisted")	24
S22	(MH "Atherectomy")	77
S23	(MH "Balloon Dilatation")	1,217



S24	(MH "Angioplasty, Balloon")	969
S25	TI ((angioplast* or stent*) OR AB ((angioplast* or stent*)	9,486
S26	TI ((balloon N5 (dilat* or catheter*))) OR AB ((balloon N5 (dilat* or catheter*)))	768
S27	S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26	13,591
S28	(MH "Endarterectomy")	393
S29	(MH "Endarterectomy, Carotid")	926
S30	(MH "Carotid Artery Diseases+/SU")	863
S31	(MH "Carotid Arteries/SU")	382
S32	TI endarterectom* OR AB endarterectom*	1,055
S33	S28 OR S29 OR S30 OR S31 OR S32	2,053
S34	S17 AND S27 AND S33	615
S35	(MH "Systematic Review")	23,821
S36	(MH "Literature Review")	3,421
S37	(MH "Meta Analysis")	16,500
S38	PT systematic review OR PT review OR PT meta analysis	142,904
S39	TI ((metaanalys* or meta analys*) OR AB ((metaanalys* or meta analys*)	16,094
S40	TI (((systematic* or literature) N2 review*)) OR AB (((systematic* or literature) N2 review*)	57,728
S41	S35 OR S36 OR S37 OR S38 OR S39 OR S40	176,853
S42	S34 AND S41	93
S43	S34 AND S41 Limiters - Published Date: 20100101-20151231	37
S44	(MH "Randomized Controlled Trials")	24,014
S45	PT Randomized Controlled Trial	29,640
S46	TI (randomi#ed or placebo) OR AB (randomi#ed or placebo)	90,659



S47	S44 OR S45 OR S46	100,884
S48	S34 AND S47	111
S49	S34 AND S47 Limiters - Published Date: 20100101-20151231	59

Database: Epistemonikos
Dato: 16.10.2015
Antall treff: 83 total (59 SR og 22 RCT)

(title:(stroke* OR infarct* OR thrombo* OR emboli* OR transient* OR TIA OR TIAs OR carotid*) OR abstract:(stroke* OR infarct* OR thrombo* OR emboli* OR transient* OR TIA OR TIAs OR carotid*)) AND (title:(angioplast* OR stent* OR balloon) OR abstract:(angioplast* OR stent* OR balloon)) AND (title:(endarterectom*) OR abstract:(endarterectom*)) From 2010-2016

Database: Best Practice
Dato: 16.10.2015
Antall treff: 10 unike (listet opp under)
Søk: angioplasty AND endarterectomy; stent AND endarterectomy; balloon AND endarterectomy

[Carotid artery stenosis > Treatment > Details > carotid endarterectomy or stenting](#)

[Ischaemic bowel disease > Treatment > Step-by-step](#)

[Ischaemic stroke > Prevention > Secondary](#)

[Overview of stroke > Resources > References](#)

[Acute exacerbation of congestive heart failure > Treatment > Step-by-step](#)

[Preoperative cardiac risk assessment > Summary > Overview](#)

[Stroke: secondary prevention > Clinical Evidence > In people with previous stroke or TIA: surgical prevention > Carotid angioplasty plus stenting](#)

[Stroke: secondary prevention > Clinical Evidence > In people with previous stroke or TIA: surgical prevention > Eversion v conventional carotid endarterectomy](#)

[Stroke: secondary prevention > Clinical Evidence > In people with previous stroke or TIA: surgical prevention > Vertebral percutaneous transluminal angioplasty](#)



[Transient ischaemic attack > Treatment > Details > carotid endarterectomy or stent](#)

[Vascular dementia > Resources > References](#)

Database: UpToDate
Dato: 16.10.2015
Antall treff: 137 (listet alfabetisk under)
Søk: angioplasty endarterectomy; stent endarterectomy; balloon endarterectomy

Acute mesenteric arterial occlusion
Acute procedure anxiety in adults: Course, screening, assessment, and differential diagnosis
Acute procedure anxiety in adults: Epidemiology and clinical presentation
Amaurosis fugax (transient monocular or binocular visual loss)
Anesthesia for carotid endarterectomy and carotid stenting
Antiplatelet agents in acute ST elevation myocardial infarction
Antiplatelet therapy after coronary artery stenting
Antiplatelet therapy for secondary prevention of stroke
Antithrombotic therapy for elective percutaneous coronary intervention: Clinical studies
Antithrombotic therapy for elective percutaneous coronary intervention: General use
Bariatric procedures for the management of severe obesity: Descriptions
Budd-Chiari syndrome: Management
Carotid artery stenting and its complications
Carotid endarterectomy
Celiac artery compression syndrome
Central and branch retinal artery occlusion
Central vein stenosis associated with hemodialysis access
Chlamydia pneumoniae infection as a potential etiologic factor in atherosclerosis
Chronic mesenteric ischemia
Chronic rhinosinusitis: Management
Chronic thromboembolic pulmonary hypertension: Surgical treatment
Classification of lower extremity peripheral artery disease
Clinical manifestations and diagnosis of chronic kidney disease resulting from atherosclerotic renal artery stenosis
Clinical monitoring and surveillance of the mature hemodialysis arteriovenous fistula
Clinical syndromes of stunned or hibernating myocardium
Clinical trials of cholesterol lowering in patients with cardiovascular disease or diabetes
Clinical utility of cardiovascular magnetic resonance imaging
Comparison of drug-eluting intracoronary stents
Complications of carotid endarterectomy
Coronary artery bypass graft surgery: Prevention and management of vein graft stenosis
Coronary artery bypass grafting in patients with cerebrovascular disease



Coronary artery revascularization in patients with diabetes mellitus and multivessel coronary artery disease
Coronary artery stent thrombosis: Clinical presentation and management
Coronary artery stent thrombosis: Incidence and risk factors
Coronary artery stent types in development
Coronary collateral circulation
Coronary complications of atheroablative devices
Coronary reperfusion for acute myocardial infarction in older adults
Drug-eluting compared to bare metal intracoronary stents
Drug-eluting intracoronary stents: General principles
Early cardiac complications of coronary artery bypass graft surgery
Elective noncardiac surgery after percutaneous coronary intervention
Embolism from atherosclerotic plaque: Atheroembolism (cholesterol crystal embolism)
Endoscopic balloon dilatation for removal of bile duct stones
Endoscopic management of bile duct stones: Standard techniques and mechanical lithotripsy
Endovascular devices for thoracic aortic repair
Endovascular methods for aortic control in trauma
Endovascular repair of abdominal aortic aneurysm
ERCP in patients with Roux-en-Y anatomy
Evaluation of carotid artery stenosis
Evaluation of obscure gastrointestinal bleeding
Extracranial carotid artery aneurysm
Fish oil and marine omega-3 fatty acids
Flexible bronchoscopy balloon dilation
General principles of the use of intracoronary stents
Horner syndrome
Hypertension after renal transplantation
Initial evaluation and management of transient ischemic attack and minor stroke
Intraaortic balloon pump counterpulsation
Intracoronary stent restenosis
Intracranial large artery atherosclerosis
Intrauterine balloon tamponade for control of postpartum hemorrhage
Intravenous magnesium sulfate in acute myocardial infarction
Lower extremity peripheral artery disease in end-stage renal disease
Management and outcome of D-transposition of the great arteries
Management of adults with bicuspid aortic valve disease
Management of asymptomatic carotid atherosclerotic disease
Management of benign esophageal strictures
Management of coarctation of the aorta
Management of coronary heart disease in women
Management of failed fibrinolysis (thrombolysis) or threatened reocclusion in acute ST elevation myocardial infarction
Management of left main coronary artery disease



Management of postpartum hemorrhage at cesarean delivery
Management of significant proximal left anterior descending coronary artery disease
Management of symptomatic carotid atherosclerotic disease
Medical management of symptomatic aortic stenosis
Methods to achieve hemostasis in patients with acute variceal hemorrhage
Monitoring and surveillance of hemodialysis arteriovenous grafts to prevent thrombosis
Natural history and treatment of pulmonic stenosis in adults
Neurologic complications of cardiac surgery
Neuromonitoring in surgery and anesthesia
Nickel hypersensitivity and coronary artery stents
Oropharyngeal trauma in children
Overview of deep small bowel enteroscopy
Overview of surgical and endovascular techniques for upper extremity revascularization
Overview of the evaluation of stroke
Overview of the treatment of chronic thromboembolic pulmonary hypertension
Overview of the treatment of stenosis and thrombotic complications of hemodialysis arteriovenous grafts and fistulas
Pathophysiology of symptoms from carotid atherosclerosis
Patient survival after renal transplantation
Percutaneous angioplasty for the treatment of venous stenosis affecting hemodialysis access grafts
Percutaneous balloon aortic valvotomy
Percutaneous interventional procedures in the patient with lower extremity claudication
Percutaneous mitral balloon valvotomy for mitral stenosis
Pericardial disease associated with malignancy
Perioperative management of hypertension
Periprocedural and long-term gastrointestinal bleeding in patients undergoing percutaneous coronary intervention
Periprocedural bleeding in patients undergoing percutaneous coronary intervention
Periprocedural complications of percutaneous coronary intervention
Placement and management of indwelling ureteral stents
Preanesthesia evaluation for cardiac surgery
Prehospital fibrinolysis (thrombolysis) for suspected acute ST elevation myocardial infarction
Prevention of neurologic complications of cardiac surgery
Primary failure of the hemodialysis arteriovenous fistula
Primary percutaneous coronary intervention in acute ST elevation myocardial infarction: Determinants of outcome
Primary percutaneous coronary intervention in acute ST elevation myocardial infarction: Periprocedural management
Primary percutaneous coronary intervention versus fibrinolysis in acute ST elevation myocardial infarction: Clinical trials
Prognosis and treatment of cardiogenic shock complicating acute myocardial infarction
Pulmonic stenosis (PS) in neonates, infants, and children
Quantitative coronary angiography: Clinical applications



Renal infarction
Revascularization in patients with stable coronary artery disease: Coronary artery bypass graft surgery versus percutaneous coronary intervention
Screening for asymptomatic carotid artery stenosis
Secondary prevention for specific causes of ischemic stroke and transient ischemic attack
Short-term mechanical circulatory assist devices
Specialized revascularization devices in the management of coronary heart disease
Spontaneous cerebral and cervical artery dissection: Treatment and prognosis
Stable ischemic heart disease: Indications for revascularization
Strategies other than treatment of stenosis to prevent thrombosis of hemodialysis vascular access grafts
Subclavian steal syndrome
Surgical management of claudication
Transesophageal echocardiography in the evaluation of mitral valve disease
Transmyocardial laser revascularization for management of refractory angina
Treatment of aneurysmal subarachnoid hemorrhage
Treatment of bilateral atherosclerotic renal artery stenosis or stenosis to a solitary functioning kidney
Treatment of chronic lower extremity critical limb ischemia
Treatment of fibromuscular dysplasia of the renal arteries
Treatment of Takayasu arteritis
Treatment of unilateral atherosclerotic renal artery stenosis
Tricuspid stenosis
Unruptured intracranial aneurysms
Use of intracoronary radiation to prevent restenosis
Use of intracoronary stents for specific coronary lesions
Use of stents for venous stenosis associated with dialysis vascular access
Valvar aortic stenosis in children
Valvular heart disease in elderly adults
Vertebral artery revascularization