

Who Treats Vascular Access Thrombosis and When? A Comprehensive Survey of All French Hemodialysis Centers

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Objectives: Vascular access thrombosis (VAT) is a severe complication that needs a timely treatment. The annual incidence of VAT and the timeliness of its treatment are not currently known.

Methods: A comprehensive survey of all the nephrologists staffing all hemodialysis centers in France was performed during March and April 2013. The number of patients, percentage of permanent or temporary catheter use, incidence of VAT, specialty of the referral physician consulted to treat VAT, and mean time to treatment were recorded for each center. Data were compared between rural and urban zones of each center.

Results: A total of 266 of 269 centers (99%) participated, with 114 private centers, 118 hospitals, and 37 academic hospitals treating 32,461 hemodialysis patients. A total of 27,798 patients (85%) used an arteriovenous (AV) fistula or graft, and 4663 (15%) required a permanent catheter. In 104 centers treating 11,088 patients with AV fistula or grafts, there were 905 documented episodes of VAT (8.2%) in 1 year; in the other 162 centers that supplied a range, the mean incidence of VAT was 8.5%. Immediately after diagnosis, 8% of the centers routinely placed a temporary catheter, and 26% never placed any catheter. Fifty-three percent of centers refer VAT to a vascular surgeon (VS) and 32% to an interventional radiologist (IR), with only 2% to urology and 13% variable referral depending on case complexity. There was a difference in referral patterns between rural (VS, 75%; IR, 25%) and urban centers (VS, 49%; IR, 51%). Time to treatment was <24 hours in 58% of the centers and <48 hours in 91% of the centers; treatment >48 hours (9%) occurred predominantly in rural zones ($P = .04$). The specialty of the treating physician did not influence time to treatment ($P > .05$).

Conclusion: The annual incidence of VAT is 8%, and 91% of cases in France are treated ≤ 48 hours, consistent with European treatment guidelines. There is a disparity between rural and urban centers regarding the specialty of the treating physician. Increasing access to VSs may be an alternative to regionalization of specialty care.

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Effects of Publications of Centers for Medicare and Medicaid Services (CMS) Guidelines for Carotid Artery Stenting (CAS) and CREST Results on National and Regional Utilization of CAS for Carotid Revascularization

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Objectives: Since approval of carotid artery stenting (CAS), there have been two seminal publications about CAS reimbursement (Centers for Medicare and Medicaid Services, 2008) and results (Carotid Revascularization Endarterectomy vs. Stent Trial [CREST], 2010). We explored trends in CAS utilization after these publications nationally (National Inpatient Sample [NIS]) among different specialties performing CAS and regionally (Vascular Study Group of New England [VSGNE]) among mostly vascular surgeons.

Methods: The most recent data sets of NIS and VSGNE were queried for patients undergoing CAS using appropriate International Classification of Diseases-9th Edition codes. Utilization proportions of CAS were calculated quarterly from 2005 to 2011 for NIS and from 2005 to 2013 for VSGNE. Three time intervals were selected Q1/2005 to Q2/2008 (P1), Q2/2008 to Q3/2010 (P2), and after Q3/2010 (P3) related to CMS guidelines and the CREST publication. Logistic regression with terms modeling change in the odds ratio (OR) for the second and third time intervals was used to estimate different trends in CAS utilization for overall samples and for symptomatic and asymptomatic cases.

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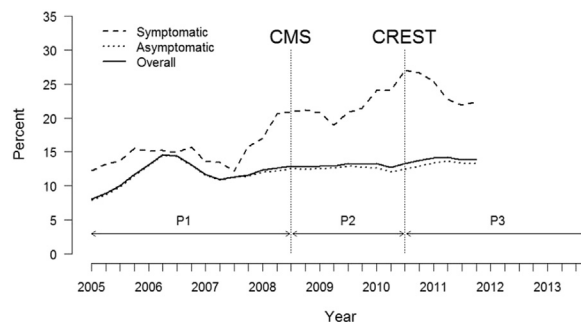


Fig 1. National Inpatient Sample (NIS) carotid artery stenting (CAS; moving average). CMS, Centers for Medicare and Medicaid Services; CREST, Carotid Revascularization Endarterectomy vs. Stent Trial.

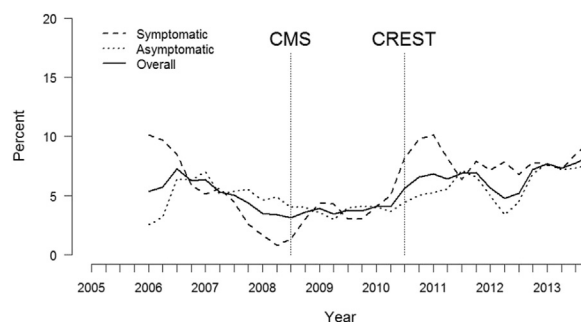


Fig 2. Vascular Study Group of New England (VSGNE): carotid artery stenting (CAS; moving average). CMS, Centers for Medicare and Medicaid Services; CREST, Carotid Revascularization Endarterectomy vs. Stent Trial.

Results: In the NIS sample, 95% of CAS was performed in asymptomatic patients vs 67% in the VSGNE data set. Overall CAS utilization was higher nationally than regionally (12.51% in NIS vs 5.64% in VSGNE). CAS was used more frequently for symptomatic patients in VSGNE (6.36% vs 5.31%; $P = .032$) and in NIS (19.12% vs 12.17%, $P < .001$) samples. Nationally, there were significant increases in frequency of CAS in P1 ($P < .001$) and P3 ($P = .027$), with a plateau during P2 ($P = .599$). In VSGNE, we observed an overall significant decrease in CAS during P1 ($P = .004$) and then significant increases in CAS in P2 ($P = .036$) and in P3 ($P = .005$). Fig 1 and Fig 2 summarize trends for the overall, symptomatic, and asymptomatic groups.

Conclusions: Overall use of CAS has increased since 2005 but was not uniformly affected by CMS guidelines or the CREST publication. The CAS use within VSGNE followed a more predictable pattern.

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Portal Vein Reconstruction in Pancreatic Resection: Technical Risk Factors for Portal Vein Thrombosis

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Objectives: Vascular reconstruction can facilitate pancreas tumor resection, but optimal methods of reconstruction are not well studied. We analyzed our results for portal vein reconstruction (PVR) for pancreatic resection and determinants of postoperative patency.

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