Message from the President

This year marks the thirtieth anniversary of the founding of our Society. I suspect the founders of our organization are extremely proud that we have grown to almost 1,000 members, the second largest vascular society in North America, and that our annual meeting has become one of the premier educational venues for vascular disease.

There has been tremendous change in vascular surgery and it seems that change and challenges are proceeding at an increasingly rapid pace. Our specialty is in a state of flux, as are our training paradigms. Will the “vascular surgeon” give way to the “vascular specialist”? What role will non-surgeons play in the delivery of vascular care in the future? Are we on the cusp of seeing vascular surgery come of age or become obsolete? Will patients and society finally recognize and appropriately value the contributions vascular surgeons continue to make to the welfare of our aging population? These are vital issues that concern all of us. For the moment, the answers to these questions will differ from region to region, but there is little doubt that in the foreseeable future national trends will emerge. Recognizing this, the Executive Committee of the SCVS is working with other national and regional vascular societies to promote vascular surgery as an independent specialty both among our medical colleagues and to the public at large.

At last year’s annual meeting, the membership endorsed the movement toward an independent Board of Vascular Surgery, recommended by the Presidents of the SVS and AAVS. At the June meetings of these two organizations, both the SVS and AAVS membership voted to have their leadership prepare an application for an independent Board for Vascular Surgery and to solicit the endorsement of the American Board.

(continued on page 12)
Safety and Efficacy of Low Molecular Weight Heparin Following Vascular Procedures

A.P. Hingorani, MD, E. Ascher, MD, C.A. Gramse, PhD, ANP, Y. Gunduz, MD, S. Kallakuri, MD, Brooklyn, New York

SUMMARY: The use of low-molecular weight heparin (LMWH) for treatment of venous thrombotic events and for prophylaxis to prevent venous thrombosis surgically is now an accepted modality for these indications. The question of utilizing low-molecular weight heparin postoperatively and perioperatively after vascular surgical procedures is still unclear. The objective of the paper presented was to determine whether or not this was a safe and effective modality and could be used to replace unfractionated heparin postoperatively and secondly whether indeed this would reduce the postoperative length of stay while obtaining full anticoagulation. The use of heparin and anticoagulation has certainly been involved with vascular surgery for many years in two categories; namely, adjunctive anticoagulation due to poor runoff or a poor conduit or in resumptive anticoagulation in patients with atrial fibrillation, prosthetic cardiac valve or prior contralateral reconstructions. In the past this required the use of unfractionated heparin being switched to Coumadin that certainly could, in many cases, delay the discharge date significantly as one attempted to obtain the appropriate INR. This was a retrospective review from May of 1998 to February of 2000 reviewing 2,453 procedures, 195 of which required postoperative anticoagulation, 3/4 of which were for adjunctive purposes and 1/4 for resumptive anticoagulation. During this period of time, in the earlier portion of the study, this was with unfractionated heparin and with the later portion of the study, the therapy more commonly was with low-molecular weight heparin, specifically, enoxaparin at 1 mg/kg q.12h. The results showed that there were no differences in complication rates between the two forms of heparin and actually, there was an increase in thrombosis with unfractionated heparin compared to low-molecular weight heparin. The length of stay appeared to be decreased by two days from the average of 7 to now 5 days with the use of low-molecular weight heparin and, in particular, the subgroup most commonly improved upon were in the femoral-popliteal and femoral-distal reconstructions by using low-molecular weight heparin. The lessons learned appear to be five in nature: 1) That education of the insurance companies regarding the cost benefit improvement is mandatory. 2) Education of home care nursing involving the injections and the reporting of INR’s is mandatory. 3) Patient education involving the actual injection is necessary. With other modalities that allow once a day dosing such as Fragmin, this will even be less of an issue. 4) The continued importance of patient education involving the actual injection is necessary. 5) The use of a clinical coordinator before actual discharge. All of these will be necessary to incorporate this new algorithm into practice. In addition, it would be prudent to be able to have prospective data and the true cost analysis to be obtained.

COMMENTARY: The paper was discussed by Blair A. Keagy who felt that the paper was well written with good statistics. He was somewhat concerned regarding the support data and whether or not this truly was a shortened hospital stay. He pointed out appropriately that this was indeed a retrospective non-randomized study and that there may very well have been bias in obtaining the data. Also, whether or not indeed the point about somewhat higher complications in the heparin group may very well have been due to the fact that these were indeed a more difficult group in the first place. He also very astutely questioned the 10% incidence of anticoagulation after carotids which appeared extremely high and finally what indeed was the cost for the usage of this approach. The questions were appropriately answered by the presenter and this paper was well received and was an excellent starting point for the clinical conference.

Review by Richard A. Lynn, MD

Intercostal Pneumatic Foot & Calf Compression in Vascular Claudicavoy: A Randomized Trial

K.T. Delis, MSc, PhD, MD, A.N. Nicolaides, MS, FRCS, N.J. Cheshire, MD, FRCS, J.H. Wolfe, MS, FRCS, London, England

SUMMARY: Dr. Delis presented a report on the benefits of intermittent pneumatic compression (IPC) in the management of patients with claudication. The study group (n=20) patients received foot & calf IPC for 2.5 hours daily for 5 months in addition to 75 mg of oral aspirin, whereas the control group (n=21) received Aspirin alone. Statistically significant improvements in claudication distance as well as in resting and post exercise ABIs were noted in the treatment group. However, no improvement in popliteal artery flow was detected in either group.

COMMENTARY: The authors present an encouraging report regarding the management of a small number of patients with claudication. Although much needs to be learned about the precise mechanisms responsible for the reported results, there are concerns with the patients’ long term compliance with this treatment. There are also questions about IPC causing patients to reduce their focus on exercise programs, and consequently lose the potential benefits on cardiovascular mortality and morbidity. Long term follow-up and studies of a larger number of patients, especially with the concurrent use of newer pharmacological agents for the treatment of claudication are needed.

Review by Baltej Maini, MD

The Safety and Efficacy of Lowdose TPA in Arterial and Venous Occlusions

C.K. Shortell, MD, M. Johansson, MD, R.M. Green, MD, K.A. Illig, MD, J.M. Rhodes, MD, Rochester, New York

SUMMARY: A retrospective review comparing the results of patients treated with urokinase (UK) to those receiving tPA for acute arterial occlusion (AAO) and acute venous occlusion (AVO). The investigators attempted to compensate for decreased doses of the lytic agent (tPA) and heparin by using cross-catheter and coaxial techniques. Both groups of patients were comparable in all clinically tested parameters. TPA was found to be equivalent to or better then UK with regard to clot lysis, incidence of major bleeding, limb salvage, and reestablishing a runoff bed.

COMMENTARY: One of relatively few reports showing a significant advantage for tPA over UK in the treatment of peripheral vascular occlusive disease. The lower doses of heparin may be as relevant to the results as the lower doses of tPA. The trend to using reduced doses of tPA continues in the hope of finding the ideal volume of an agent that has been plagued with numerous reports of disastrous bleeding complications.

Review by David Drezner, MD

Monocyte Adhesion to Human Saphenous Vein Grafts: Mechanism of Adhesion and Correlation with Graft Function

M.H. Eslami, MD, S.P. Gangadharan, M, Belkin, MD, M.C. Donaldson, MD, A.D. Whitemore, MD, M.S. Conte, MD, Boston, Massachusetts

SUMMARY: The authors hypothesized that occult intraoperative vein injury induces an immediate increase in monocyte adhesion (MA) which may be critical to the development of vein graft disease.

COMMENTARY: MA to the vein wall is immediately increased following surgical manipulation and is inhibited by mAB 7E3. Early MA to vein grafts is likely to involve interactions between Mac-1 and Fg. Heightened levels of MA at implantation may be a marker for subsequent vein graft failure.

Review by David Drezner, MD
Miller Cuff Bypass for Limb Salvage - A Two Year Assessment
E.D. Dillavou, MD, P.J. DiMuzio, MD, K.A. Chojnacki, MD, R.F. Leichter, MD, R.A. Carabasi, MD, M.B. Kahn, MD, Philadelphia, Pennsylvania

SUMMARY: Often the ipsilateral GSV is not available when the need exists to construct a femoral to infrageniculate bypass. This paper retrospectively reviews a single center experience with PTFE/Miller cuff (MC) lower extremity bypass grafting mostly to the infrageniculate arteries for the indication of limb salvage. Graft patency and limb salvage was compared against in-situ GSV (vein) bypass. The primary and secondary patency at 12 months, and the primary patency at 24 months was similar; however the “secondary” patency (the authors combined primary assisted and secondary patency results) at 24 months for the “vein” group (77%) was significantly greater than the “MC” group (49%).

COMMENTARY: According to Dr. Kim Hodgson, the higher complication rate (35/43) were treated with in-situ aortic grafts. In reply, the comparable limb salvage rate between “vein” and “MC” was 21%. The vast majority (35/43) were treated with in-situ aortic grafts undergoing thrombectomy and revision with greater success than “MC” grafts. Despite this difference in secondary patency, there was no difference in limb salvage (vein-79% vs. MC-85%), as most limbs healed.

Complication Rates of Diagnostic Angiography Performed by Vascular Surgeons
L. Baldoj, MD, M. Langsfeld, MD, J.M. Marek, MD, M.J. Tullis, MD, K. Kasirajan, MD, Albuquerque, New Mexico

SUMMARY: In this retrospective review, 224 endovascular procedures were performed by vascular surgeons, including 144 diagnostic angiograms, over a 16 month period. Diagnostic angiography was required to define aneurysmal anatomy (Type I, 54 patients), peripheral atherosclerotic occlusive disease (Type II, 73 patients), and carotid artery disease or visceral ischemia (Type III, 17 patients), with major complication rates of 0%, 2.7%, and 5.9%, respectively. Most major complications occurred during the first 25 angiograms (8%) compared to the subsequent 119 angiograms (0.8%). The authors conclude that vascular surgeons can perform diagnostic angiography with acceptable complication rates that are comparable to those reported by interventional radiologists, which is reduced with increasing angiographic experience.

COMMENTARY: Dr. Kim Hodgson noted the potential influence of inflow or runoff status in comparing the groups, as the “MC” group re-bypass rate was 41% vs. 14% in the “vein” group. Dr. Ascher remarked that conservative therapy and anticoagulation might achieve a limb salvage rate of 75%. In reply, the comparable limb salvage rate between “vein” and “MC” was emphasized. A second comment about low graft flow rates due to poor runoff, led to a question regarding the value of an adjunctive A-V fistula. In reply, the author stated no experience with this technique. Dr. Ricotta asked a question about what happens to the MC during thrombectomy and revision. In reply, “MC” graft thrombectomy did not require vein cuff revision. A second question expressed concern about runoff obliteration as seen with PTFE bypass grafts. In reply, this phenomenon was not observed.

Infected Aortic Aneurysms: Aggressive Presentation and Complicated Outcome
G.S. Oderich, MD, J.M. Panetta, MD, T.C. Bower, MD, K.J. Cherry, Jr., MD, C.M. Roland, M.S., J.W. Hallett, Jr., MD, P. Głowicki, MD, Rochester, Minnesota

SUMMARY: This was a superb paper that was well presented and outlined a rare problem that only a large center such as the Mayo could compile 43 cases. It demonstrates that in situ reconstruction for infected aneurysms can work successfully and durably and may be the best solution for patients presenting with this rare problem. Since it would be very difficult to look at this prospectively, it was difficult to understand whether reduced recurrent infection in the in situ replacements was due to antibiotic impregnated grafts or other technical adjuncts used intraoperatively, however the Mayo group did do a superb job of analyzing their perioperative results and correlating to their postoperative complications.

COMMENTARY: Dr. Oderich presented clinical data from the Mayo Clinic’s 25 year experience with 43 patients who presented with infected aortic aneurysms. These primary infections involved the thoracic or thoracoabdominal aorta in a quarter of the patients with 75% of the patients presenting with abdominal aortic infections. Fifty-three percent of patients presented with ruptured aneurysms and the overall mortality from this series was 21%. The vast majority (35/43) were treated with in-situ aortic graft (continued on next page)
replacement with the remainder undergoing extra anatomic reconstruction. Chronic graft infection was 6% of the in-situ and 17% for extra anatomic which was statistically significant. Bacteriology seemed to play an important role in the increased risk of early and late vascular complications with staphylococcus infection being a major determinant of recurrent problems. These aneurysms presented aggressively and were treated with equal vigor and the Mayo group should be commended for their superb results in this very difficult patient population. Review by R. Clement Darling, III, MD

Initial Clinical Experience with the ARIBA In-Situ Adjustable Endovascular Graft for Treating Abdominal Aortic Aneurysms

B.J. Brenner, MD, T. Connelly, MD, P.L. Faries, MD, V. Sefranek, MD, S. Hertz, MD, M.L. Marin, MD, New Jersey, New York, & Illinois

SUMMARY: This was a very small series with short term follow-up. Thus, other than the theoretic and perceived technical advantages, it was very difficult for the discusants to evaluate this new technology. One critique offered was that since modular grafts have had a problem with migration, would this expandable type of graft be more susceptible to migration or endoleak concerns in the long term and I think we will have to wait for more long term data in order to fully evaluate the usefulness and durability of this graft.

COMMENTARY: Dr. Brenner presented the experience with a new type of adjustable endovascular graft for the treatment of abdominal aortic aneurysms. He presented this data as part of the study group that involved new work at Beth Israel, Mount Sinai, New York CARLE Heart Center, and others. This graft is different from prior endografts in construction that the precise length for iliac limbs may be changed during insertion in order to make the graft fit better and be less reliant on the vagaries of preoperative length measurement. Also, he outlined how these grafts may be used to reconstruct the hypogastric arteries and preserve hypogastric flow in many patients who may have to have their hypogastrics excluded in order to give adequate exclusion of the abdominal and iliac aneurysm. This was a study of 15 patients in a Phase I FDA trial with a short term follow-up and dealt more with the technical and theoretical advantages of this graft with limited short term data. There were no deaths or aneurysm ruptures, although one patient required a renal bypass because the graft was deployed across the renal artery orifice. This was preliminary data and we will be looking forward to hearing more about this type of graft in the future.

Review by R. Clement Darling, III, MD

Internal Iliac Artery Revascularization as an Adjunct to Endovascular Repair of Aorto-Iliac Aneurysms

P.L. Faries, MD, N. Morrissey, MD, J. Burke, MD, L.H. Hollier, MD, M.L. Marin, MD, New York, New York

SUMMARY: Eight (8) internal iliac artery revascularizations (IIR) were performed in 7 patients undergoing endovascular AAA repair. Successful IIR and endovascular AAA were accomplished in all cases. No proximal or distal (Type I) endoleaks occurred; one patient demonstrated a Type II endoleak which sealed spontaneously within 3 months. All IIR have remained patent during a follow-period of 2-10 months.

COMMENTARY: The authors concluded the IIR may be used with good short and intermediate term patency to prevent pelvic ischemia in patients whose aneurysm anatomy requires extension of the endograft to the external iliac artery. This may allow endovascular AAA repair to be performed in patients who could otherwise not be treated safely.

Minimal Incision Aortic Surgery (MIAS)

W. D. Turnipseed, MD, J.R. Cohen, MD, J.R. Hoch, MD, S.C. Carr, Madison, Wisconsin

SUMMARY: The authors evaluated the clinical and economic impact of using Minimal Incision Aortic Surgery (MIAS) for treatment of the abdominal aeurysms (AAA) and aortoliac occlusive disease (AOID).

COMMENTARY: The authors concluded that MIAS is as safe as standard open aortic surgery. Reduction in ICU stay and hospital length of stay correlate with cost savings using the MIAS procedure and they may be the preferred procedures for treating younger, good-risk patients with AAA and/or AOID and high risk patients who do not qualify for endovascular repair.

Exclusion of Accessory Renal Arteries During Endovascular Repair of Abdominal Aortic Aneurysms

R.V. Aquino, MD, R.Y. Rhee, MD, S.C. Mulak, MD, E.Y. Tzeng, MD, M.S. Makaroun, MD, Pittsburgh, Pennsylvania

SUMMARY: The group at the University of Pittsburgh reviewed 214 consecutive cases of endovascular repair and focused on 25 patients (12%) in whom a total of 38 accessory renal arteries were excluded from aortic inflow by the endovascular graft. Three different endovascular grafts (Ancure – 17, AneuRx – 3, and Excluder – 5) were used in the procedures. All patients had a creatinine of 2.0 or less. Four patients (27%) had documented segmental renal infarction consistent with exclusion of the intended artery. Only one patient developed a clinically significant change in hypertension postoperatively and this resolved at 3 months follow up. Serum creatinine levels were unchanged in all but one patient who developed “progressive postoperative renal failure despite normal renal flow scan.”

COMMENTARY: The study represents “accessory” renal artery exclusion in a favorable light. There are many cases where the exclusion of a small renal artery in a patient at high risk for open repair where the risk/benefit analysis would clearly favor this approach. The group at Pittsburgh has obviously made the clinical analysis of risk/benefit for their patients very accurate because clinical research protocols are usually not designed to analyze this variable. It is difficult to generalize the conclusions without more quantitative data on the exact size of the arteries excluded and the relationship to the other arteries supplying the kidney. Selective arteriography of significant accessory renal arteries would also contribute to a more objective assessment of the amount of renal tissue that might infarct. While few would quibble with exclusion of renal arteries that would be sacrificed with open surgery, caution is warranted in deviating from the principles that have made conventional aneurysm surgery as durable and reliable as it is.

Review by David H. Deaton, MD

Limb Interventions in Bifurcated EGS Patients: A Review of the Phase II EVT Trial

R.M. Fairman, MD, R.A. Baum, MD, O.C. Velazquez, MD, D.W. Deaton, MD, M.S. Makaroun, MD, Philadelphia, Pennsylvania

SUMMARY: The authors reviewed the data from the Phase 2 FDA IDE trial of the bifurcated EGS graft WITH respect to the necessity of additional intervention to maintain graft limb patency. 242 cases were examined and interventions were temporally classified in two categories: intraoperative and postoperative. There were 68 (28%) intraoperative interventions and 28 (12%) postoperative interventions. A secondary postoperative intervention was required in three (1%) patients. Endovascular techniques (i.e. balloon angioplasty, stenting, catheter-based thrombolysis) were employed in 88% (n=60) intraoperative interventions and 79% (n=22) postoperative interventions. The remainder of intraoperative (12%, n=8) were described as “combined interventions” without mention of any open surgical techniques. The remainder of postoperative interventions (21%, n=6) utilized fem-fem bypass. The six patients requiring an open technique represent 2.4% of the total study population. There was no tissue loss associated with endograft limb obstruction or occlusion in this trial.

COMMENTARY: This retrospective review of the EGS Phase 2 trials demonstrates the vulnerability of an unsupported fabric graft constrained to an endovascular location. The data presented represented the early experience of the first bifurcated endovascular graft introduced in this country and
an analysis of early and late investigator experience within this trial would be
of considerable interest. The vast majority (97%) of patients was treated with
interventional means and most of them at the time of the original procedure.
Remarkably there was no tissue loss despite the relatively high frequency of
intervention for a perceived obstruction to flow. Since balloon angioplasty
is inherent to the deployment of this unsupported graft, a firm definition of
what is meant by “balloon angioplasty” as an additional intervention would
contribute to the ongoing analysis of this problem. The type and position of
stents placed is also critical to ongoing analysis of the success of intervention
for this device. Since metallic erosion of graft fabric has been documented in
a variety of supported endografts, the effects of stents placed secondarily
in this unsupported graft will be of great interest.

Review by David H. Deaton, MD

The Impact of Medicare Denials on Noninvasive Vascular Diagnostic Testing
M. A. Passman, MD, R.J. Gazman, MD, R. Pierce, RN, RVT, T.C. Naslund,
MD, Nashville, Tennessee

SUMMARY: Dr. Passman is to be commended for this original presentation
that was pertinent to all vascular surgeons. He determined that 15.9% of all
vascular lab claims for Medicare patients at his institution were denied
initially because of inaccurate submission of ICD-9 codes. Of these claims,
88% were resubmitted and eventually paid.

COMMENTARY: Dr. Passman concluded that expedient identification of
denials and an active appeals process are necessary to avoid uncompensated
technician time and uncollected professional fees. Overall, this was a practi-
cal and well-presented topic.

Review by Nancy S. Clark, MD

Elbow Crease Fistula: autogenous alternative to access in abused arms.
R.W. Heidepriem, MD, M.A. Drummond, MD, R. Scott McCord, MD, J. Rusbury,
P.A., R.K. Spence, MD, Birmingham, Alabama

SUMMARY: The authors present their experience with AV fistulas constructed
at the level of the elbow that they use instead of a graft AV fistula. Forty pa-
tients have brachio-cephalic AV fistulas constructed. 47% of patients had ac-
cesses constructed before this procedure. The secondary patency rate of these
fistulas was 64% at one year. They conclude that this fistula is superior to the
AV graft alternative, because of “the decrease incidence of infections”.

COMMENTARY: The NKF-DOKI criteria have stimulated the preferential
use of autogenous AV fistulas over synthetic AV grafts. This paper demon-
strates the feasibility of constructing these autogenous fistulas in the elbow,
in patients with previous hemoaccesses done in that limb. It is surprising that
no brachio basilic vein transposition AV fistula was performed. This is an
excellent autogenous alternative with good long-term patency.

Review by Harry R. Schanzer, MD

Impact of Secondary Procedures in Autogenous Arteriovenous Fistula
Maturation and Maintenance
S.S. Berman, MD, A.T. Gentile, MD, Tucson, Arizona

SUMMARY: This work evaluated the results of procedures intended at
improving the function of AV fistulas that failed to mature (9 fistulas) and
fistulas that were failing (6 fistulas). Different procedures such as patches,
vein interposition, transposition a more proximal vein and balloon angioplasty
of the subclavian artery were performed. As a result of these procedures, an
80% one-year patency rate and a 90% of functional fistulas was achieved.

COMMENTARY: The authors demonstrated that by intervening in mal-
functioning AV fistulas, improvement in function and patency could be
achieved. It is important to note that all corrections of venous stenosis were
done with open surgical interventions. In the discussion period, the authors
said that in their anecdotal experience, results of percutaneous balloon
angioplasty were unsatisfactory. Careful comparative studies of these two
approaches need to be done.

Review by Harry R. Schanzer, MD

Prevalence of Carotid and Lower Extremity Occlusive Disease and
Economic Impact of Routine Screening in Patients with Abdominal
Aortic Aneurysm
D.A. Axelrod, MD, MBA, N. Lopez, BS, A. Diwan, BS, J.C. Stanley, MD, L.A.
Jacobs, MD, P. Henke, MD, L.J. Greenfield, MD, T.W. Wakefield, MD, G.R.
Upchurch, MD, Ann Arbor, Michigan

SUMMARY: Clinical data were analyzed for 230 AAA patients evaluated
from 1994-98. All patients underwent carotid artery duplex scanning and
lower extremity arterial Doppler studies. CVOD requiring operation was
found in 6.7% of patients and PVOD in 10.4%. In patients with severe
CVOD, 87% had symptoms. No patient was found to have severe PVOD.
The presence of symptoms or history is over 95% specific.

COMMENTARY: The authors concluded that routine screening for CVOD
and PVOD in patients with AAA is not justified. Selective screening of
symptomatic patients is sufficiently specific and considerably less expensive.

Diagnosis and Treatment of Paradoxical Embolus
J.A. Travis, MD, S.B. Fuller, MD, G.W. Plonk, MD, R.H. Dean, MD, K.J.
Hansen, M.C., Winston-Salem, North Carolina

SUMMARY: The diagnosis of paradoxical embolus is difficult and conse-
quently the literature is limited on this subject and the veracity of the current
recommendations for treatment unknown. The authors report 13 patients
with paradoxical embolus, all of whom had the diagnosis confirmed by saline
contrast transhoracic or transesophageal echocardiography. The extremity
was the most common location for the paradoxical embolus. A pulmonary
embolus was documented in seven patients. Longterm treatment for all
patients was by anticoagulation. Five patients had a caval filter placed. Only
one patient had the patent foramen ovale closed. No recurrence embolic
events occurred during a mean followup of 5 years.

COMMENTARY: The discussion was initiated by Dr. Peter Gloviczki who
inquired as to why cerebrovascular embolization was so prevalent in other
series of paradoxical embolus. Dr. Travis suggested that in other series, the
certainty of diagnosis was suspect leading to a misleading higher incidence
of cerebrovascular embolization. Dr. John Ricotta inquired concerning the
indications for a caval filter and commented on the importance of pulmonary
hypertension in accentuating the right to left shunt and promoting paradoxical
embolism. Dr. Lazar Greenfield emphasized that in addition to patients in
whom embolization occurred on anticoagulation or in whom anticoagulation
is contraindicated, a caval filter should be strongly considered in patients with
marginal pulmonary reserve and/or pulmonary hypertension which increases
the right to left shunt and the possibility of paradoxical embolism. This was
a fascinating paper well presented by Dr. Travis with important take-home
points: the importance of diagnosis and the use of saline contrast echocardiography,
anticoagulation as the preferred method of treatment, placement of caval filters in selected patients with recurrent pulmonary
embolus or marginal pulmonary reserve.

Review by Fred A. Weaver, MD, FACS

Transcatheter Embolization of Peripheral Vascular Malformations: The
Long Term Success of Multiple Interventions
C.B. Rockman, MD, R.J. Rosen, MD, G.R. Jacobowitz, MD, J. Weiswasser,
MD, P.J. Llamparello, MD, M.A. Adelman, MD, P.J. Gagne, MD, T.S. Riles,
MD, New York, NY

SUMMARY: The limitations of surgical therapy for vascular malformations
(VM) is well known. Transcatheter embolization using catheter based
techniques has now evolved to a highly effective treatment for these lesions.
This particular study detailed an extensive experience with transcatheter
therapy of extremity VM. Over 50% of the VM treated were mixed arterial
and venous, 32% purely venous and the remainder were purely arterial. The
authors used n-butyl cyanoacrylate exclusively for embolization with the
exception of the isolated venous malformations, which were treated with
direct injection sclerotherapy of absolute alcohol. All VM treated were
symptomatic. Pain was the most common symptom. Ulcer, hemorrhage or
edema was present in alone or in combination in a minority of patients. At an
average followup of 57 months, the average number of embolizations
(continued on next page)
required per patient was 1.6. Thirty percent of patients had more than one treatment and 92% were completely asymptomatic or improved. Only 8% remained very symptomatic with one patient requiring a below knee amputation.

**COMMENTARY:** In Dr. Katherine Krol’s discussion, she inquired as to why other devices such as coils, embolic particles such as gel foam, or absolute alcohol were not used for mixed or purely arterial VM. The author, Dr. Rockman responded that other materials in their experience are not as efficacious. Alcohol in particular can be quite injurious if used for mixed and arterial VM. Balloons and coils only serve to occlude proximal inflow, but do not obliterate the fistulous connection which leads to further vessel recruitment and expansion of the VM. Another comment by Dr. Krol concerned followup which according to the authors should be lifelong. Since, the patient is never cured, symptoms can recur many years following initial treatment. Finally, an important point was made regarding the risk of pulmonary embolism following embolization of VM located in the pelvis. Although pelvic VM were not part of this report, this can be a devastating complication with massive pulmonary embolism and death having been reported.  

Review by Fred A. Weaver, M.D.

**Graft Migration After Endovascular Repair of Abdominal Aortic Aneurysm**

S.D. Kalliafas, MD, J. Albertini, MD, J. Macierewicz, MD, S.W. Yusuf, FRCS, S.C. Whittaker, FRCR, I. Davidson, FRCS, B.R. Hopkinson, FRCS, Nottingham, United Kingdom

**SUMMARY:** One hundred seventy-six (176) consecutive patients who had endovascular repair of AAA with a custom made graft were studied. There were 15/176 (8.5%) graft migrations (6 intraoperative and nine late). Of those 14/128 (10.9%) occurred in the infrarenal (IR) and 1/48 (2.1%) in the suprarenal (SR) group. Median neck diameter on preoperative and postoperative CT scan were 23.5 mm and 24.1 mm respectively.

**COMMENTARY:** The authors concluded that distal graft migration occurs frequently after endovascular repair of AAA. Late migration is not associated with changes in neck diameter. Endografts with a SR stent may be associated with decreased incidence of graft migration.

**The Effects of Endovascular Stent grafts on Open Aortic Aneurysm Surgery Training**

F.R. Arko, MD, W. A. Lee, MD, B.B. Hill, MD, E.J. Harris, MD, R.L. Dahlman, MD, C. Olcott, IV MD, T.J. Fogerty, MD, C.K. Zarins, MD, Stanford, California

**SUMMARY:** The authors describe their experience with 588 patients who underwent surgical or endovascular reconstruction of abdominal or thoracoabdominal aortic aneurysms over a six year period. All patients were analyzed to evaluate the changing patterns in open aortic aneurysm training. The number of open aneurysm repairs in the three years before and after the implementation of an endovascular stent graft program were compared. Because more suprarenal aneurysm repairs were performed after the implementation of an endovascular stent graft program the authors conclude that endovascular stent graft use was associated with an increase in the complexity of aneurysms repaired. Because there was no significant difference in the number of open infrarenal aneurysmectomies in the two periods, the authors also conclude that the introduction of endovascular stent grafts to treat aneurysms did not adversely affect training in vascular surgery.

**COMMENTARY:** While it is clear that the endovascular stent graft program during this period increased the number and complexity of aneurysm surgeries, this was also a period when the number of vascular groups in the country participating in aortic stent graft trials was limited. With widespread availability of stent grafts since their approval by the FDA early in 2000, it is possible that in many surgical groups the number of open aneurysmectomies will decrease as those patients deemed candidates for stent grafts are removed from the total number of cases likely to be seen by a given group. In our hospital, 80 patients underwent aneurysmectomy in the year prior to FDA approval of aortic stent grafts. During the year stent grafts were approved there was a slight increase in the total number of aortic cases to 87. Thirty-seven were repaired using the stent graft. Aneurysm cases were shared equally by four chief surgical residents whose open aortic aneurysm operative experience was roughly cut in half after the introduction of the endovascular stent graft. Widespread adoption of endovascular graft stent treatment for aortic aneurysm may adversely affect the volume of operative experience in aortic surgery. Some centers will maintain or increase the number of aortic surgeries performed but many will not. It will be interesting to see whether the increase seen in the authors’ institution will be sustained with widespread availability of this device.  

Review by John J. Castronuovo, Jr., MD

**Contemporary Management of Acute Mesenteric Ischemia: Factors Associated with Survival**

W.M. Park, MD, P. Głowiczki, MD, K.J. Cherry, Jr, MD, J.W. Hallett, Jr., MD, T.C. Bower, MD, J.M. Panneton, MD, A.A. Noel, MD, Rochester, Minnesota

**SUMMARY:** I would like to congratulate the authors on their presentation and the excellence of their clinical results. An in-hospital mortality rate of 40% in patients with acute mesenteric ischemia is an enviable record.

**COMMENTARY:** This report is a bit of a mixture of apples and oranges and, as such, makes it more difficult to extract causal relationships. More specifically, I would think that the 5 patients with non-occlusive mesenteric ischemia and the 8 patients with prior mesenteric reconstructions should be excluded from this group because their natural history and prognosis is much different than those patients with native vessel embolic or thrombotic occlusions. Would results be significantly different if these patients were excluded from the analysis? When bowel resection is required, our preference is to utilize autologous vein rather than a prothetic conduit. With a short mean follow-up of only 1½ years, and a median survival of less than 1 year, I wonder about the strength of the association between the quoted clinical risk factors and survival. Although all of us would accept that survival is better in younger patients, it seems counter-intuitive that bowel resection, either at the original operation, or during a second-look procedure, should increase survival four-fold. Similarly, arteriography or longer time to presentation should not be protective. This suggests a selection bias but also a limitation of univariate comparisons. Do multivariate statistical analysis help to determine the true underlying risk factors for improved survival? Additionally, since revascularization did not improve patient survival, should patients requiring bowel resection even undergo bypass procedures acutely, since the ischemic damage has already taken place?  

Review by John Blebea, MD

**A Contemporary Assessment of Carotid Body Tumor Surgery**

A. Dardik, MD,PhD, D.W. Eisele, MD, B.A. Perler, MD, G. M.Williams, MD, Baltimore, Maryland

**SUMMARY:** The results of all patients undergoing carotid body tumor resection from January 1990 to June 2000 were reviewed. Carotid body tumors were resected in 25 patients. 73% of patients had local neck symptoms and 18% had ear pain; only 14% were asymptomatic.

**COMMENTARY:** The authors concluded that carotid body tumor surgery appears to be relatively free of mortality and major morbidity in contemporary practice.

**Eversion Technique Increases the Risk for Post Carotid Endarterectomy Hypertension**

M.Mehta, MD, MPH, O.Rahmani, MD, M. J. Mecenas, MD, A. Dietzek, MD, L.A. Scher, MD, S.G. Friedman, MD, F.J. Veith, MD, Bronx, New York

**SUMMARY:** In this retrospective study 217 patients had 219 carotid endarterectomies carried out by conventional method (137) or by using the eversion technique (82). Preoperatively the incidence of hypertension was comparable 67% versus 65%. Carotid nerve block was used in 19% versus 20% of the patients in two groups. However vasodilators were used in 6% of patients in the standard group and 24% in the eversion group.
Patients who had hypertension pre operatively had twice the chance of being hypertensive in the postoperative period. Patients who had evasion Endarterectomy had a significant increase in the incidence of hypertension (p<0.005). It appears that interrupting the carotid body in the evasion technique results in increased incidence of hypertension, though this phenomenon did not increase morbidity or mortality. The study makes the surgeons aware of this untoward effect of the technique. In patients who have difficult to control hypertension this technique may not be advisable.

**COMMENTS:**

**Peter Samuels MD Award Winner**

Are Somatosensory Evoked Potentials (SSEP) an Acceptable Alternative to Electroencephalogram (EEG) in Monitoring Carotid Endarterectomy?

R.V. Aquino, MD, M.S. Makaroun, MD, D.J. Crammond, PhD, D.N. Krieger, PhD, E.Y. Tzeng, MD, S.C. Malak, MD, D.L. Steed, MD, R.Y. Rhee, MD, Pittsburgh, Pennsylvania

**SUMMARY:** The authors retrospectively reviewed the use of EEG and SSEP (somatosensory evoked potential) for cerebral monitoring for carotid endarterectomy. EEG is considered a more reliable indicator of ischemia but multiple (26) electrodes are necessary, elaborate pre-operative set-up is required, and it is susceptible to anesthesia. SSEP is easier to interpret and takes less than five minutes to set-up but may miss ischemic areas outside the measured area.

**COMMENTS:** The authors reported 147 SSEP and 143 EEG cases. Patient characteristics and indications for surgery were similar in both groups except the SSEP group had a higher incidence of stroke as indication for surgery. There were no differences in ischemic changes documented in either group with all patients subsequently shunted except one: 8% of asymptomatic patients, 32% of patients with contralateral occlusion, and 49% of patients with history of stroke. There were no differences in outcome and no patient awoke with a stroke who had normal EEG or SSEP studies. Patrick Lamparello, MD discussed the paper and noted a rather high incidence of perioperative neurologic event rates and mortality rates, but Dr. Aquino noted the results were within accepted ranges. Dr. Lamparello asked how patients were managed who developed post-operative strokes in the recovery room. Dr. Aquino mentioned that in all patients, EEG or SSEP studies were normal intra-operatively but usually no technical problems were found upon re-exploration. Enrico Ascher, MD noted that measuring stump pressures is a time-tested, inexpensive means to determine need for shunting, but Dr. Aquino responded that they prefer EEG or SSEP. Alan Dardik, MD asked if simultaneous placement of both type of leads was done (it was not) and the prospect of doing a prospective study (the required numbers would be extremely high). Alan Lumsden, MD and Keith Calligaro, MD both commented that the use of cervical block anesthesia is much less expensive, much more reliable, is associated with a much lower incidence of shunting (only 5%), and is preferable to EEG or SSEP. In summary SSEP may prove to be as accurate and simpler than BEG, but will always be more expensive and less accurate cervical block anesthesia when performing these operations.

**Thank you**

Our sincere appreciation to the following physicians who agreed to serve as session reviewers for the 29th Annual Symposium. They took the time to review each paper and provide their individual summary and commentary. Their work is integral to this issue of the SCVS Newsletter. On behalf of all those who will benefit from these reviews - THANK YOU!

John Blebea, MD
Arnold Byer, MD
Keith D. Calligaro, M.D
John J. Castronuovo, Jr., MD
Nancy S. Clark, MD
R. Clement Darling, III, MD
David H. Deaton, MD
David Drezner, MD
Peter Faries, MD
Fredric Jarrett, MD
Krishna M. Jin MD
Mark B. Kahn, MD
Steven Kang, MD
Richard A. Lynn, MD, F.A.C.S.
Baltej Maini, MD
M. Ashraf Mansour, MD
F. Noel Parent, III, MD
Marc A. Passman, MD
Caron Rockman, MD
William A. Rough, MD
Harry R. Scharzer, MD
Richard K. Spence, MD
Fred A. Weaver, MD, FACS
Clinical Case Forum

Endovascular Repair of Coexisting Abdominal Aortic and Common Iliac Artery Aneurysms

M.L. Marin, MD, V. Sefranek, MD, B.J. Brener, MD, T. Connelly, MD, J. Burks, MD, F. Faries, MD, New York, New York

Dr. Faries presented initial work done at Mt. Sinai in New York with a branched endovascular graft used to treat iliac artery aneurysmal disease. This system, developed by Teramed, Inc. under the direction of Michael Marin, MD, a pioneer in endovascular graft procedures, is currently in Phase I trials. It employs a side-branched graft that is placed into the internal iliac artery via retrograde cannulation. These grafts are adjustable according to length and vessel diameter and can be used in combination with other endovascular aortic grafts. Dr. Faries emphasized the importance of this new graft with figures showing that 20-30% of patients with abdominal aortic aneurysms have involvement of the iliac arteries as well. Many of these patients currently are not considered candidates for endovascular treatment or undergo occlusion of the internal iliac artery to facilitate aortic graft placement. The Teramed system allows the surgeon to maintain patency of the internal iliac artery while expanding the utility of endovascular repair to patients with iliac artery aneurysms. More importantly, it offers an alternative to a “one size fits all” approach inherent in some endovascular procedures. Results are early and patients are few, but this system bears watching.

Review by Richard K. Spence, MD

Free Omental Transplantation: A Novel Approach for the Management of the Non-Healing Lower Extremity Wound

I.M. Ibrahim, MD, F. Silvestri, MD, W. Boss, MD, Englewood, New Jersey

Dr. Wengertter presented exciting information on behalf of the vascular surgical group at Englewood on a novel approach employing laparoscopic and free-flap techniques to the use of omentum to enhance healing in difficult wounds. This group harvested a section of omentum using laparoscopic-assisted techniques, then implanted it into the popliteal vessels with a microsurgical approach. They covered the graft with split thickness skin in their 82 year old female patient who had a distal, chronic non-healing leg wound. Her wound healed rapidly, permitting full ambulation within 12 weeks. Most vascular surgeons are familiar with the use of omental grafts to treat problem wounds, such as the infected sternum. However, these grafts have been limited to the length the omentum can reach with an intact vascular supply. The Englewood group has shown us in a “Why didn’t I think of that?” scenario that combining endovascular omental harvesting with microvascular anastomosis provides an excellent solution to distal leg wound coverage while reducing the risk of an open laparotomy. I am sure we will all consider this for our problem patients in the future.

Review by Richard K. Spence, MD

Abnormalities Associated with Aberrant Right Subclavian Arteries

D.A. Epstein, MD, J.R. DeBord, MD, Iowa City, Iowa

Dr. Epstein from the University of Illinois at Peoria presented an interesting case of a 33 year-old man who presented with dysphagia. An extensive radiologic and endoscopic work-up revealed extrinsic compression of the esophagus by the aberrant subclavian artery, a condition known as “dysphagia lusoria” or trick of nature. The authors reviewed the literature and demonstrated their approach for repair using a supraclavicular approach and transposing the aberrant subclavian artery to the right carotid artery.

Review by M. Ashraf Mansour, MD

The Ehlers-Danlos Specter Revisited

D.F. Cikrit, MD, J. R. Glover, MD, D. Silver, MD, Indianapolis, Indiana

Dr. Cikrit presented vascular complications of Ehlers-Danlos syndrome in two families. Some patients presented with spontaneous rupture of the spleen and colon. Dr. Cikrit presented the management of these patients who had spontaneous rupture of the iliac artery and management with femoro-femoral bypass. She outlined the biochemical basis of this collagen disorder and the appropriate work-up to reach the specific diagnosis. The only known medical treatment to try to prevent some of these complications is ascorbic acid (vitamin C).

Review by M. Ashraf Mansour, MD

Atheroembolism from the Abdominal Aorta Following Minor Blunt Trauma

S.S. Kang, MD, B.D. Blitstein, MD, M.J. Forseth, MD, Maywood, Illinois

Dr. Kang from Loyola in Chicago presented a rare case of distal atheroembolism due minor abdominal trauma. The patient was a fork-lift operator who sustained a minor abdominal injury by bumping his abdomen on the steering wheel when the vehicle crossed railroad tracks at a low 4 mph speed. The patient had normal pulses and a normal ankle-brachial index, however, he complained of lateral leg and calf pain. A CT scan of the abdomen showed aortic calcification and a small aneurysm, and angiography revealed atheroemboli to the distal tibial arteries of the right leg. Exploration of the leg by a non-vascular surgeon demonstrated patchy areas of muscle necrosis that were debrided. No embolectomy was performed, and the patient received heparin and coumadin anticoagulation.

Review by M. Ashraf Mansour, MD

Superior Mesenteric Artery Aneurysm Successfully Treated with a PTFE Covered Stent

M.B. Kahn, MD, J. Bonn, MD, G.J. Becker, MD, P. DiMuzio, MD, R. Leichter, MD, R Anthony Carabasi, MD, Philadelphia, Pennsylvania

The authors present the unusual case of a patient who developed severe pancreatitis after a difficult and complicated open aortic aneurysm repair which involved supraceliac clamping and medial visceral rotation. The patient subsequently developed a pancreatic pseudocyst, which was drained percutaneously. On a routine catheter check, communication with the superior mesenteric artery was noted, and angiography demonstrated a proximal SMA pseudoaneurysm. This was treated successfully with a PTFE covered stent. The patient did well for six years following the procedure, and died of unrelated causes.

Certainly this would have been a difficult open surgical procedure in an extremely hostile abdomen; the endovascular approach in this case appears to be justified and certainly had an excellent outcome. Discussion centered on the following issues: Did the authors consider the use of autogenous tissue to cover the stent for use in this certainly infected field? The authors felt that the greater saphenous vein would have been too small in this location for the size of the SMA. They did not consider jugular or superficial femoral vein. Did the pseudocyst drainage catheter erode into the SMA? The authors did not think this likely based on the location of the catheter, but admitted that this may have been a possibility. In summary, this is the first reported use of a covered stent to manage a SMA pseudoaneurysm, and certainly had a good outcome in a complex patient.

Review by Caron Rockman, MD

Infected Infrathoracic Subclavian Artery Pseudoaneurysm Treated by Femoral Vein Interposition Graft

N. Schindler, MD, K.D. Calligaro, MD, M. J. Dougherty, MD, J. Diehl, MD, M. Braffman, MD, Philadelphia, Pennsylvania

The authors present the first case of in situ replacement of an infected subclavian artery using superficial femoral vein and the fourth reported case of an infected arterial pseudoaneurysm due to a virulent organism, pseudomonas pseudomallei. The patient was a 58 year old man who had recently traveled to Indonesia, where this bacteria is endemic. The patient had a dramatic presentation. The infected artery was replaced with autogenous tissue and covered with a pectoralis flap. Despite these measures, the patient returned to the emergency room approximately 6 weeks later with a rapidly expanding pseudoaneurysm due to an infected, ruptured vein graft. Using hypothermic circulatory arrest, the subclavian artery was ligated proximally SMA pseudoaneurysm. This was treated successfully with a PTFE covered stent. The patient did well for six years following the procedure, and died of unrelated causes.

Certainly this was an amazing result in a patient with extremely aggressive disease. There are apparently several reported cases of pseudoaneurysms due to infection with this particular bacteria in the literature. All patients have had extremely aggressive courses. The authors are recommending that even autogenous vein grafts should not be used in patients with this or other particularly virulent bacterial arterial infections. In this setting, even vein grafts can become infected and disrupted with potentially disastrous consequences. Perhaps primary ligation should be the primary definitive therapy.

Review by Caron Rockman, MD
H. Dardik Receives Lifetime Achievement Award

A highlight of the Friday evening banquet was the Lifetime Achievement Award presented to Dr. H. Dardik. Dr. Marshall Webster spoke of Dr. Dardik's many years of devoted service to the SCVS, and how Dr. Dardik had been the primary force in transforming the SCVS into a large, influential national organization, with membership approaching 1000. And yet, despite its rapid growth and the development of a scientific session of exceptional quality, the unique camaraderie and wonderful meeting venues have been preserved.

The award, a beautiful sculpture by the renowned artist Ronardo, was made possible through the generosity of Bio-Vascular, Inc.
COMMITTEE ON ISSUES SESSION

Comprehensive Review of “Renovascular Disease: Are Surgeons Necessary Anymore?”
Moderator: Keith D. Calligaro, MD.

Medical Management of Renovascular Hypertension: Is Balloon Angioplasty or Surgery a Thing of the Past?
Stephen Textor, MD

Dr. Textor provided an excellent historical review of the diagnosis and treatment of renovascular hypertension. After establishing the historical context in which renovascular hypertension has been treated, he went on to describe the impact of the current techniques for medical management. He highlighted the mechanisms of medical treatment and provided an excellent review of the natural history studies of renal artery stenosis on which we rely to judge the need for intervention. He summarized his interpretation of the current literature by describing circumstances under which intervention for renal artery stenosis is warranted. The main indication for intervention he suggested was failure of medical management. That is, patients whose blood pressure cannot be adequately controlled, who exhibit an increasing serum creatinine, who have episode of flash pulmonary edema or who exhibit rapid progression of their symptoms. Overall Dr. Textor provided a thoughtful discussion that was very clear, well documented and presented in an elegant manner.

When do I Recommend Surgery for Renovascular Hypertension or Renal Salvage?
Richard P. Cambria, MD

Dr. Cambria put forth a sophisticated discussion of the cognitive components underlying the decision to intervene on renal artery stenoses. His primary focus was on atherosclerotic lesions. He initiated the discussion focusing on the lesions initially taught by Dr. Stanley regarding the management of renal artery lesions: That these lesions most frequently represent extensions of aortic disease and that an intimate knowledge of aortic and renal arterial anatomy is prerequisite for intervention. In discussing combined aortic and renal artery interventions he noted that the indications for each lesion should be considered independently. He noted that in patients who demonstrate fulminant presentations (hypertensive crises, flash congestive heart failure, progressive azotemia) surgical vascular reconstruction can provide an immediate and durable solution to the clinical problem. He also noted that other clinical factors such as the rate and degree of decline in renal function and the presence of a solitary functioning kidney favored the performance of surgical revascularization. The presentation was extremely lucid and reflected the superb results achieved at the Massachusetts General Hospital using a multidisciplinary approach.

Why Cardiologists Should Perform Balloon Angioplasty of the Renal Arteries?
Nadir Al-Mubarak, MD

Dr. Al-Mubarak sought to describe several arguments favoring the increased role of the cardiologist in the treatment of renovascular hypertension. He noted that interventional cardiologists have acquired the wire and catheter skills that would enable them to approach renal artery interventions with some expectation of technical success. He also noted that cardiologists have had a long-standing role in the management of hypertension, which is the most common indication for intervention in these patients. In addition, since concurrent atherosclerotic disease is frequently present elsewhere in these patients, particularly in the coronary circulation, ongoing medical management by a cardiologist is appropriate. During the discussion session several members of the audience expressed exception to Dr. Al-Mubarak’s arguments, noting that the interventional cardiologists who would typically be performing catheter-based procedures are seldom involved with the ongoing management of the patient’s hypertension and atherosclerotic disease. It was also noted that an adequate system of peer review should accompany any program seeking to initiate the treatment of renovascular hypertension. President-elect Ricotta rose to note that benefit may be derived from the involvement of a multidisciplinary committee in the selection of patients in whom renal revascularization is indicated. The short and long term follow-up of outcomes in these patients should also be monitored. Overall the subject provided for a very lively discussion and the expression of a wide variety of viewpoints.

The session was moderated by Dr. Calligaro who deftly steered the commentary so as to find a common ground for discussion amongst the presenters and who nimbly intervened when technical difficulties assailed Dr. Al-Mubarak’s presentation.

Review by Peter Faries, M.D.

ATTENTION............

SCVS Newsletter Readers

Throughout the reviews of the SCVS Annual Meeting, there are several caricatures of meeting participants. Our thanks to SCVS member, William D. Turnipseed, M.D. from the University of Wisconsin Medical School for sharing these with us.

THE CHALLENGE:
Can you identify the participants drawn by Dr. Turnipseed?

Let us know if you think you know who is pictured, especially if you think it’s YOU!
E-Mail: lorraine@prri.com or fax (978) 526-1703
Drs. Ascher and Ricotta organized a very condensed and instructive dinner symposium on vascular access for hemodialysis. Dr. Michael B. Silva spoke on ‘Increasing Upper Extremity Vein Utilization by Pre-operative Duplex Scan Mapping’ and stressed, as did others, the need to obtain a 50% autogenous fistula construction rate on initial fistulas by 2002 to be in compliance with the DOQI recommendations. He emphasized that clinical examination alone is inadequate to allow maximum utilization of autogenous fistulas. When ultrasound was used, 53% of patients who would have been rejected for autogenous fistula construction on the basis of PE alone had adequate veins demonstrated. Important aspects of the ultrasound examination include: identification of a vein of adequate diameter: 3 mm for autogenous fistulas, 4 mm for a graft in continuity with an upper arm vein, configuration of upper and lower arm veins and arterial inflow. Only 15% of the fistula constructed were of the traditional Cimino type. Dr. Silva also recommended a follow-up duplex scan at 4-6 weeks with marking of the best site for cannulation and performing the initial cannulation with a small (17 gauge) needle.

Dr. Harry Schanzer discussed “Hand Ischemia Following Arteriovenous Operations for Hemodialysis”: 80% of these patients were seen in the first 30 days after fistula construction and only 20% were seen late. There is a mild and a severe form. Confirmation is possible with digital plethysmography with and without compression of the fistula and a finger-to-brachial index of less than 0.06 is consistent with ischemic steal. Several corrective operations are possible for ischemic steal: ligation, banding, elongation and ligation of the artery with bypass, and the DRIL (Distal revascularization—interval ligation) procedure, but only the latter has acceptable results. Dr. Schanzer most commonly used the DRIL procedure in 34 patients identified with ischemic steal over a five year period. This procedure achieved a similar patency in brachiobasilic or brachiocephalic fistulas. Patency was less in patients with diabetes mellitus or those who had prior fistulas. No difference could be attributed to age, sex or hypertension. Maturation rates were 97% for brachiobasilic fistulas, 89% for brachiocephalic fistulas and 74% for radiocephalic fistulas. Dr. Robert Zwolak spoke on “Update on Coding and Reimbursement for Primary and Secondary A.V. Access”. Bob has expended a tremendous amount of effort over the past few years in attempting to educate HCFA on appropriate coding and level of effort afforded by vascular surgeons, particularly for some of the more complex operations performed in vascular surgery. New codes for AVF (fistulas), AV graft thrombectomies with and without revision and basilic vein transposition in the upper arm will be available in 2001 and a new code for forearm vein transposition will be available in 2002.

Dr. Anil P. Hingorani discussed an “All Autogenous Policy for A.V. Access: Basilic vs. Cephalic Vein Transposition”. His group achieved a similar patency in brachiobasilic or brachiocephalic fistulas. Patency was less in patients with diabetes mellitus or those who had prior fistulas. No difference could be attributed to age, sex or hypertension. Maturation rates were 97% for brachiobasilic fistulas, 89% for brachiocephalic fistulas and 74% for radiocephalic fistulas.

Dr. Alan B. Lumden discussed “Maintenance Angioplasty of Arteriovenous Grafts: Is It Effective?” Several of the DOQI guidelines were discussed. No evidence was found to support one particular graft type over another (ringed vs. thin walled, etc.). Six months’ patencies for angioplasty of a 50% stenosis was 67 ± 8% compared to 63 ± 9% for observation. The costs of follow-up were analyzed and the presenter’s conclusion was that one could not justify treatment of all 50% stenoses in PTFE grafts.

Dr. Russell H. Sampson discussed “Use of the Computerized Registry to Improve Ouality of Life for Hemodialysis Access Patients”. The audience was afforded the benefit of the presenter’s considerable expertise in computer technology and computer based slide presentations. The ability of the computerized data base to afford the surgeon feedback on his results and for other technical improvements can be enhanced by means of rapid access to clinical information. The need for a modem to tie into the database was emphasized as well as appropriate software and a word processor. The costs of the computer requirements were not substantial.

Dr. Robert Zwolak spoke on “Update on Coding and Reimbursement for Forearm Vein Transposition in 2001 and a new code for forearm vein transposition will be available in 2002. We currently need but do not have codes for the “DRIL” procedure and brachiocephalic transposition as well as for vascular lab study denials.

**Symposium on Vascular Access for Hemodialysis**

**Moderators:** Enrico Ascher, M.D. and John J. Ricotta, M.D.

**New codes for AVF (fistulas), AV graft thrombectomies with and without revision and basilic vein transposition in the upper arm will be available in 2001 and a new code for forearm vein transposition will be available in 2002.**
Message from the President
(continued from page one)

of Surgery in this effort. This will be a complex process, but the wheels of change seem to be in motion and the conclusion that vascular surgery will be recognized as unique, is inescapable.

It is important that not only the ABMS, but also the public at large, appreciate the scope of vascular surgery and the role of the vascular surgeon in the delivery of healthcare. This requires advocacy and education at multiple levels. This effort is being led nationally by the AAVS, but the SCVS is an active participant. The SCVS joined the Vascular Website, which will link multiple vascular organizations and provide a forum for physician and patient education. In the coming year we look forward to joint efforts in the socioeconomic arena by coordinating efforts with the American Association for Vascular Surgery. Our Society has been given a seat on the Council of the American Association for Vascular Surgery. Our Secretary, Peter Lawrence, will fill that position.

Our annual meeting continues to evolve. While it remains one of the best professional venues for social interchange, over the last few years the educational program has grown in scope, depth, and quality. In the past several years, the Postgraduate Education Committee has developed a series of excellent postgraduate courses. Last year’s meeting was marked by outstanding courses in non-invasive vascular diagnosis and dialysis access, as well as a problem solving session in endovascular therapy. In recognition of its contributions to the Annual Program, this Committee has been made a standing committee of our Society. The Alistair Karmody poster session, started two years ago by Peter Lawrence, is now an established part of the Program, and provides an additional forum for presentation of basic and clinical research. The 2001 Program (reviewed inside this issue of the Newsletter) was one of the strongest ever, and we look forward to similar quality in Las Vegas in 2002.

The Society for Clinical Vascular Surgery was established to provide a forum for practicing vascular surgeons to share clinical insights and present new ideas in vascular care. This has been done in a congenial environment that fosters personal and professional relationships. In this area, we have been tremendously successful. I believe it is time we extend these efforts to our colleagues outside the United States. At the same time, it is important that the SCVS, representing clinical vascular surgeons, be an active participant in shaping the future of vascular care in the new millennium. We will join our sister societies in educating our patients, our legislators and our fellow physicians on the critical and unique role vascular surgery, and vascular surgeons, must play in health care in the 21st century.

This is an exciting time for our specialty. I am greatly honored to serve as your 30th President and look forward to your comments and support in the coming year.

Vascular Self Evaluation Program

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President’s Report

Marshall W. Webster, MD, expressed his appreciation to the membership for electing him to serve as their President over the past year. Dr. Webster provided information regarding the realignment of the national vascular societies into the formation of the new American Association for Vascular Surgery. The AAVS mission includes the oversight of public education, website development and surgical reimbursement issues. The Executive Committee endorsed the following statement as an affirmation for the SVS/AAVS continued negotiations with the American Board of Surgery. This discussion and adopted resolution took place during the SCVS Executive Committee meeting of April 4, 2001. The statement is as follows: “The Executive Committee of the Society for Clinical Vascular Surgery endorses the efforts of the Strategic Planning Committee of the SVS/AAVS to develop an Independent Board of Vascular Surgery ideally through continued negotiation with the American Board of Surgery”.

Report of the Secretary

Current membership: 649 Active members, 21 Honorary members, 1 Inactive member, 209 Senior members, 0 Foreign/Corresponding members, and 87 Candidate members; total membership - 967.

Report of the Treasurer

Total assets of the Society are approximately $40,000. Total receipts through the course of the year were $381,000 versus total disbursements of $414,000 for a net deficit for the year of $33,000. The Treasurer recognized the following corporations for their outstanding contribution to the educational efforts of the Society: W.L. Gore & Associates; IMPRA; Atrium Medical Corporation; Dupont; Aventis Pharmaceutical Products; AstraZeneca and Centocor.

Report of the Recorder

The Society will forward all manuscripts from oral presentations to the Journal of Vascular Surgery for their consideration of publication in October 2001. All case and poster presentations will be presented to Vascular Surgery for their consideration for publication. There were 34 oral presentations at the 2000 annual meeting. 31 manuscripts were submitted to the Journal of Vascular Surgery for consideration (91%), of which 19 of the manuscripts were published (61%) and 15 manuscripts were published in the October SCVS issue of the JVS (48%). There are six manuscripts still pending and six manuscripts were rejected outright. All 12 poster and case reports submitted to Vascular Surgery were accepted for publication. The breakfast debate and Committee on Issues presentations were submitted to Perspectives in Vascular Surgery.

Representative to the ACS Advisory Council for Vascular Surgery

Dr. Dardik reported that he continues to represent the views of vascular surgery to the American College of Surgeon’s Vascular Surgery Advisory Board. The ACS is developing specific vascular scientific programs for the Spring Meeting in 2002 and 2003.

Nominating Committee

The Committee consisting of past presidents Drs. McCart, Gloviczki, and Menzoian and the President-Elect, Dr. John Ricotta proposed the following slate of officers for election in 2001:

- President: John J. Ricotta, M.D., Stony Brook, New York
- President-Elect: Enrico Ascher, M.D., Brooklyn, New York
- Vice President: Kim Hodgson, M.D., Springfield, Illinois
- Secretary: Peter F. Lawrence, M.D., Orange County, California
- Treasurer: O. William Brown, M.D., Southfield, Michigan
- Recorder: Joann M. Lohr, M.D., Cincinnati, Ohio

Member-at-Large: Anton Sidawy, M.D., Bethesda, Maryland

HIGHLIGHTS FROM THE EXECUTIVE COMMITTEE MEETINGS

Major items and issues addressed by the Executive Committee:

- Dr. Lawrence as the Secretary of the organization has been appointed as the SCVS representative to the AAVS.
- The new Allastair Karmody Award for best poster will be highlighted during a formal Poster Session on Thursday, April 5, 2001 from 5 p.m. – 7 p.m. The Karmody Award for best poster is now presented for the best selected poster. Each presenter will have three minutes to orally present their posters followed by a two minute question and answer.
- The SCVS Annual Meeting presentations are now considered for publication in the Journal of Vascular Surgery.
- The Executive Committee agreed to a new role of the Postgraduate Education Committee. The SCVS Program Committee will be responsible for all abstracts selected for oral and poster presentations during the Annual Meeting program. The Postgraduate Education Committee will be responsible for all other symposia and scientific satellite or breakout sessions. The President will have the responsibility of pulling the whole program together. Dr. Kim Hodgson will continue to chair the SCVS Postgraduate Education Committee.
- One hundred sixty abstracts were submitted for consideration to the 2001 Program Committee. Twenty-eight abstracts were accepted for oral presentations and the Program Committee chose two separate case study presentations of five case studies each. There were fifty accepted poster presentations for the Karmody poster session. The program also include separate symposia on Varicose Veins, CPT coding and Wound Healing.
- The Executive Committee has again elected to contribute $1,000 to the American College of Surgeons Endowment Fund.
- The Membership Committee will evaluate the possibility of offering International Membership.
- Dr. Dardik, Newsletter Editor, reported on his plan for the evaluation/review of all presenters at this annual meeting as articles in the next issue of the Newsletter. Distribution of the Newsletter is much more efficient and effective; the summer issue, received by the membership prior to the Call for Abstract deadline, encourages members to submit their abstracts to the Society and the winter Newsletter, received by the membership three or four weeks prior to the annual meeting, encourages the memberships’ registration and attendance at the annual meeting.
MEMBERSHIP CHANGES

New Active Members

Benjamin B. Chang, M.D., Albany, New York
Michael A. Drummond, M.D., Birmingham, Alabama
Mark Farber, M.D., Chapel Hill, North Carolina
Frederick S. Fisher, M.D., Voorhes, New Jersey
Hugh A. Gelabert, M.D., Los Angeles, California
Glenn R. Jacobowitz, M.D., New York, New York
Tony Katras, M.D., Johnson City, Tennessee
Andris Kazmers, M.D., Detroit, Michigan
Evan C. Lipsitz, M.D., Bronx, New York
William E. Lloyd, M.D., Albany, New York
R. Scott McCord, M.D., Birmingham, Alabama
William D. McMillan, M.D., Minneapolis, Minnesota
James W. McNeil, M.D., Baton Rouge, Louisiana
Matthew M. Melin, M.D., St. Louis, Minnesota
Dan L. Morehouse, M.D., Des Moines, Iowa
Richard C. Pennell, M.D., St. Louis, Missouri
Ramanathan Raju, M.D., Brooklyn, New York
Thomas Reifsnyder, M.D., Pittsburgh, Pennsylvania
Caron R. Rockman, M.D., New York, New York
Larry A. Scher, M.D., Manhasset, New York
Victoria J. Teodorescu, M.D., New York, New York
Michael D. Traynor, M.D., Fargo, North Dakota
Gerald B. Zelenock, M.D., Royal Oak, Michigan

Honorary Membership

Dr. James May, Sydney, Australia

Transfer to Senior Membership

Donald J. Gaspard, M.D., Pasadena, California
David R. Jackson, M.D., Florence, Massachusetts
David J. Katz, M.D., Northridge, California
M. Leonard Kleiman, M.D., Jupiter, Florida
Richard M. Kremer, M.D., Seattle, Washington
Phillip LoGiudice, M.D., Rancho Palos Verdes, California
Bruce W. Lowney, M.D., Boston, Massachusetts
Donald E. McDowell, M.D., Morgantown, West Virginia
Albert F. Peters, M.D., La Quinta, California
David C. Reyes, M.D., Bay City, Missouri
Robert E. Richardson, M.D., Santa Rosa, California
Jerome G. Stabile, M.D., Eastern, Pennsylvania

Resignations

Edmund P. Chute, M.D., Minneapolis, Minnesota
Moshe Haimov, M.D., New York, New York
Michael L. Schwartz, M.D., Minneapolis, Minnesota
D. Mitchell Stinnett, M.D., Joplin, Missouri
David H. Stubbs, M.D., Des Moines, Iowa
Robert R. Torrey, M.D., Glendale, California

A REVIEW OF THE PRESIDENTIAL ADDRESS
given by Marshall W. Webster, MD

“A Belated Obituary”

Following a humorous, as well as serious, introduction by President Elect John J. Ricotta, President Marshall W. Webster delivered his presidential address, “A Belated Obituary”. Dr. Webster began by congratulating the SCVS on its growth into a vibrant society and then discussed the specialty.

The deceased for whom the "obituary" is given is General Surgery Sr., who died of multi-specialty fragmentation organ failure, as a result of splitting into children and grandchildren. President Webster reports that the health of General Surgery Jr. is in grave danger due to the outdated regulations of the American Board of Surgery that continues to train surgeons for a career that no longer exists and produces General Surgery Jrs. with insufficient training and experience. He outlined the problems facing Vascular Surgery - older trainees; training that is too long; and the trainees’ accumulation of large debt and their struggle to make a living.

His Rx for the good health of Vascular Surgery is an independent American Board of Vascular Surgery with its own RRC that would oversee training and compress it to a reasonable maximum of 5 to 6 years, suggesting 3 general and 3 vascular, similar to what plastic surgery has done.

He concludes (and has been joined by a large majority of vascular surgeons surveyed) that the time is now ripe for a separate board as “we are fully-grown now and it is time to move on”. The members and guests demonstrated with their enthusiastic applause their appreciation and agreement with President Webster’s message.

Review by Arnold Byer, MD
American College of Surgeons Response to Governors’ Recommendations

Larry Hollier, M.D.

The following is an overview of the major efforts made by the American College of Surgeons during the past year to respond to the five primary categories outlined by the Governors:

Managed Care and Physician Reimbursement
- Endorses H.R 2723, the Norwood Dingell Bipartisan Consensus Managed Care Improvement Act of 1999.
- Legislative alerts and Capitol Hill Visitation Program continue to support managed care legislation.
- Supports legislation allowing health care professionals to unite in negotiating with health maintenance organizations.
- Workshops presented on Audit-Proofing Surgical Practices.
- How to Run a More Profitable Practice workshops held.

Professional Liability
- Professional liability courses and panels presented at Clinical Congress.
- *Bulletin* informs Fellows of professional liability issues.
- Supports tort reform through major coalition effort.
- Educational materials available to assist Fellows facing potential malpractice suits.

Graduate Medical Education
- College Executive Director and other surgical representatives meet with MedPAC staff to raise concerns about GME financing reform.
- Fifth biennial Young Surgical Investigators Conference held March 11-13, 2000.
- Provides $1.5 million in funding for research, scholarships, and fellowships.

Medicare Program
- College joins 30 other medical and specialty societies to promote legislation to halt reductions for procedures as RVUs are phased into Medicare fee schedule.
- AMA House of Delegates approves resolution calling on AMA to seek Congressional action to halt practice expense values for most services at present level.
- ACS Fellow appointed to Medicare Practicing Physicians Advisory Council (PPAC).
- General surgeons serving on Medicare Carrier Advisory Committees (CAs) meet at Spring Meeting.
- Continues to present CPT and ICD coding workshops. Coding hotline continues to be effectively used.
- *Physicians as Assistants at Surgery: 1999 Study* published

New Technology, Education and Credentialing
- Committee on Emerging Surgical Technology and Education develops hands-on-courses to teach new procedures to practicing surgeons.
- Courses Image-Guided Breast Biopsy, Ultrasound and Sentinel Node Biopsy Presented at Clinical Congress and Spring Meeting.
- Efforts underway to encourage delivery of standardized new technology courses by surgical organizations outside ACS.
- Two Clinical Trials funded.
- Continues to pursue the concept of evaluating and verifying a surgeon’s qualifications for use of emerging surgical technologies.

2001-2002 Executive Committee

<table>
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<tr>
<th>President</th>
<th>John J. Ricotta, M.D.</th>
<th>Stony Brook, New York</th>
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<tr>
<td>President-Elect</td>
<td>Enrico Ascher, M.D.</td>
<td>Brooklyn, New York</td>
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<td>Vice President</td>
<td>Kim J. Hodson, M.D.</td>
<td>Springfield, Illinois</td>
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<td>Secretary</td>
<td>Peter F. Lawrence, M.D.</td>
<td>Irvine, California</td>
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<tr>
<td>Treasurer</td>
<td>O. William Brown, M.D.</td>
<td>Southfield, Michigan</td>
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<tr>
<td>Recorder</td>
<td>Joann Lohr, M.D.</td>
<td>Cincinnati, Ohio</td>
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Past Presidents
- Peter Gloviczki, M.D.
- Rochester, Minnesota
- James O. Menzolian, M.D.
- Boston, Massachusetts
- Marshall W. Webster, M.D.
- Pittsburgh, Pennsylvania

ACS Board of Governors
- Larry Hollier, M.D.
- New York, New York

ACS Advisory Council for Vascular Surgery
- Herbert Dardik, M.D.
- Englewood, New Jersey

Members-at-Large
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- Atlanta, Georgia
- Kenneth E. McIntyre, Jr., M.D.
- Dallas, Texas
- Anton N. Sidawy, M.D.
- Washington, DC

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- Luis A. Sanchez, M.D.

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- James O. Menzolian, M.D.
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  - Joann M. Lohr, M.D.
  - John J. Ricotta, M.D.

Student/Resident Award Committee
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- John J. Ricotta, M.D.
- Marshall W. Webster, M.D.