Much has been written about inter- and intra-species competition. Perhaps the best example is Robert Ardrey’s “The Territorial Imperative.” We’re all familiar with images of the African watering hole surrounded by collections of various animal species mingling in defined patterns and demonstrating respect for the dominant animals. Once away from the watering hole, they only mix with their own species and an intra-species turf structure emerges. Only occasionally does an animal break out of its assigned role of dominance and submission.

The hospital is the African watering hole of the health care world. Medical specialties are its species. The difference, however, is that a number of factors are causing old species to atrophy or evolve and new species to emerge.

The stable structure of the vascular environment was first shaken in 1964 when Charles Dotter demonstrated the potential of a new revascularization procedure that didn’t require surgery. Charles was an extraordinarily innovative thinker who conceptualized and tried many new procedures that offered a number of potential advantages to patients. However, he was not a careful investigator in the eyes of his critics and was not successful in convincing a skeptical and powerful establishment that they should support his new ideas. It didn’t help that he told his surgical audiences that surgery would be obsolete in the near future.

Dr. Dotter did, however, inspire others who looked past the early technical difficulties, lack of adequate supporting research, and overly optimistic expectations to see the fundamental implications of these developments. Continued progress was impeded, however, by:

- A lack of understanding about the disease. Peripheral vascular disease was the province of the vascular surgeon whose knowledge contained shibboleths about the behavior of plaque when dilated, its propensity to embolize when manipulated, and the risk of vessel rupture or devastating wall damage if stretched.
- Poor understanding about the critical attributes of the various tools and instruments of a system and procedure that might be most likely to succeed.
- Lack of tools and technology to implement ideas and measure the benefits of one approach versus another. Catheters, wires, balloons, flow measurement instruments, and high-resolution arterial imaging devices were all in their infancy.

One of the people Dotter inspired was a German radiologist by the name of Eberhard Zeitler. He kept Dotter’s work going until the early 1970s when a young German angiologist practicing in Zurich, named Andreas Gruentzig, was inspired to improve the tools and technique with the ultimate goal of applying it to the coronary arteries. Gruentzig was not only a technical innovator; he was a creative and
increased patient awareness and advocacy. Wide-

changes in technology. New tools for treatment,
driven by a number of factors: and lead in these new techniques.

it was this background that led to the turf wars
we have today. Gruentzig did not have a particular
specialty in mind that would perform his new pro-
cedure. In fact, he worked with a multidisciplinary
team in its developmental phases. He recognized
that the skill sets needed for this new procedure did
not exist in any single specialty. Vascular surgeons
at that time did not believe that the procedure held
promise for any but the most select cases and did
not see the value of learning catheter skills for this
limited opportunity. The group that did pay some
attention were diagnostic radiologists, whose
catheter skills had been evolving with the increas-
ing sophistication of selective angiography and
who were motivated to challenge their abilities
with this new application. It is ironic that the vast
majority of radiologists did not view this new tech-
iique as one they should be pursuing or see that it
had a role in clinical medicine. Nevertheless, PTA
became the key driver of the new specialty of inter-
ventional radiology.

as PTA and related procedures evolved, some
radiologists saw peripheral procedures as a learn-
ing opportunity for new technologies that might
potentially be applied to coronaries, such as
atherectomy and laser angioplasty. When endo-
vascular procedures started to develop and stents
evolved into stent grafts, vascular surgeons began
to realize that it was essential for surgeons to learn
and lead in these new techniques.

in essence, then, endovascular turf wars are being
driven by a number of factors:

• Changes in technology. New tools for treatment,
stent grafts, new delivery systems, better imaging
for screening, follow-up and procedure guidance,
etc. are enabling new diseases to be treated and old
diseases to be “better” treated. Frequently these
developments come from, or are supported by,
physicians who do not normally treat the disease.
Suppliers of the new technology contribute to the
problem by promoting it to their specific customer
and sponsoring training courses.

• increased patient awareness and advocacy. Wide-

ly available procedures such as PTCA, arthro-
scopic surgery and laparoscopic cholesystectomy
have educated the public about the benefits of less

invasive therapy. The battles that occurred during
the evolution of these therapies have encouraged
some patients to demand the less invasive alterna-
tive. Whether the patient is informed or misin-
formed is not the issue. The traditional or
established procedure will always be challenged
by a new one, and the new procedures will be per-
formed by non-establishment types — from dif-
derent specialties.

• Managed care. Although perceived by most to be
an oxymoron, the goal of managed care is simply
to organize and allocate intellectual, physical and
financial resources in a way that brings the great-
est good to the greatest number for the least cost.
Managed care will favor procedures that reduce
risk, trauma, time and cost. Also, it will encourage
one specialist to do it for less than another.

• Intransigent medical societies. Frequently, the
greatest impediment to medical advances have
been medical societies who feel that their turf is
being threatened. Since the major raison d’être for
any medical society is self-preservation, the idea
of collaboration and sharing is looked on with
great suspicion. Establishing licensure and other
barriers to entry is the common response.

it is worthwhile to note that both Dotter and Gruen-
tzig were multi-specialty oriented. No part of the
anatomy was off limits for Dotter and not much was
off limits for Gruentzig. Andreas Gruentzig, in partic-
ular, strongly believed in multi-specialty collabora-
tion and “walked the talk” in his presentations,
publications and courses. He envisioned disease-
focused centers of expertise that included a number of
collaborating specialists.

barry Katzen recognized the components needed
for a radiologist to build and sustain a successful
interventional practice. Although many people
questioned the propriety and ethics of “marketing”
one’s new practice to primary care specialists and
the community at large, it has become an essential
part of developing referrals, relationships, and
“turf protecting.” These programs are now part of
many society courses.

the bottom line for any specialist who is under
attack by competing specialists for control of a
procedure is the development of data. Clinical,
quality of life, and economic outcomes are the
standard by which all practices will be measured.
The tools are available. Over time, economic
incentives to compete and exclude will be replaced
by incentives to collaborate. The disciplined team
that is committed to maintaining and communicat-
ing information on its outcomes will define the
successful practice.
REFERENCES