Acute Care Surgery: Back to the Future!

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The Acute Care Surgery (ACS) concept is growing rapidly around the globe as many countries struggle with providing emergency and trauma surgical care to an increasing population of people who present with life and limb threatening surgical disease. The need for such services is rapidly growing as the population of the world ages, and with longer life expectancies, more people will experience a critical surgical illness and seek care urgently. Many of these conditions are time dependant for optimal outcome and require prompt diagnosis and definitive surgical management.

Founded in the field of trauma surgery, the ACS surgeon in North America is rapidly taking on a growing deficit in emergency care created by most "general surgeons" becoming specialty surgeons, entering specialized practices and/or reaching an age or position that allows them to no longer cover "emergency room call."

Though contemporary in name, the concept of a generalist expert surgeon being knowledgeable, well trained, experienced and willing to provide prompt and expert care for a wide breath and diverse group of surgical emergencies is not new. Until the later twentieth century, dealing with surgical emergencies was the core of all general surgical training and occupied a great part of the daily practice of general surgery. General surgeons have always been the specialist to respond to emergency departments) and care for the acute abdomen, the cold leg, GI bleeding, soft tissue infection, trauma and other critical problems in the chest, neck and extremities. Their skill set and availability have positioned them as the doctors for the "sick patients" and long before modern intensive care specialists, the general surgeon provided critical care to these patients. Acute Care Surgery recaptures this "core" type of practice but focuses it into an all emergency environment.

One training curriculum developed and published by the American Association for the Surgery of Trauma assures that the ACS surgeon is expert at trauma, critical care, and the vast majority of surgical emergencies. Other curriculums might address regional or national needs that address unique characteristics of the population and access to medical care. More remote and rural populations, especially with limitations of pediatrics, obstetrics or orthopedics would benefit from a very broad based emergency surgeon skilled in burn care, caesarean section, joint relocation, bone setting, etc. Military surgeons, prior to deployment, might be better prepared with targeted clinical experiences to address the common wounding mechanisms, and if far forward or isolated, would benefit from additional training for thoractomy, craniotomy, vascular shutting, and mangled extremity management.

In addition, the ACS concept capitalizes on the successful trauma system design where an in-hospital surgeon is ready, willing and able to resuscitate, manage, operate and treat in all phases of major surgical illness 24 hours a day. In many countries, ACS surgeons are employing evidence based guidelines and strong performance improvement methods to assure optimal outcomes. The experience thus far is favorable and many centers are reporting increased efficiency, patient satisfaction, cost effectiveness and improved clinical outcomes.

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