HEARTBEAT

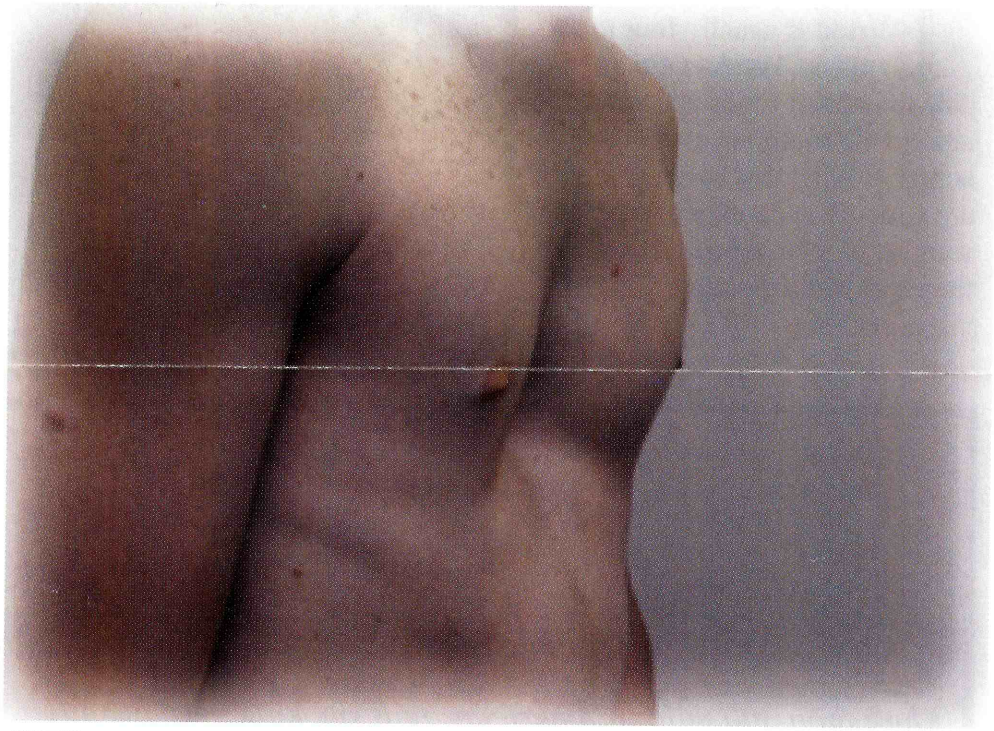
VOLUME 1, ISSUE 1

FALL 2004

Michael Damrich, M.D.
Carl Maltese, M.D.
Ronald O'Gorman, M.D.,PhD

William Higgs, M.D.
Dimitris Kyriazis, M.D.
David Mull, M.D.

Pectus Excavatum – Not a Cosmetic Defect



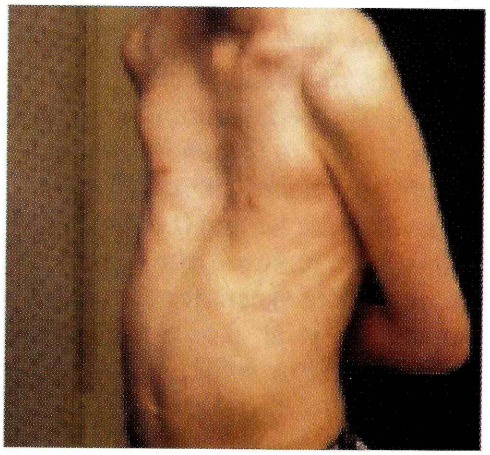
Pectus Excavatum is the most common congenital chest wall deformity. It can be mild to severe and affects as many as one in 300 births. The current theory regarding its etiology involves overgrowth of the lower costal cartilages which leads to rotation and depression of the sternum. The most severe depression occurs in the lower part of the sternum. Xrays show that as the space between the sternum and spine narrows, the heart shifts to the left and rotates posteriorly. The deformity also limits the ability of the chest to expand during respiration.

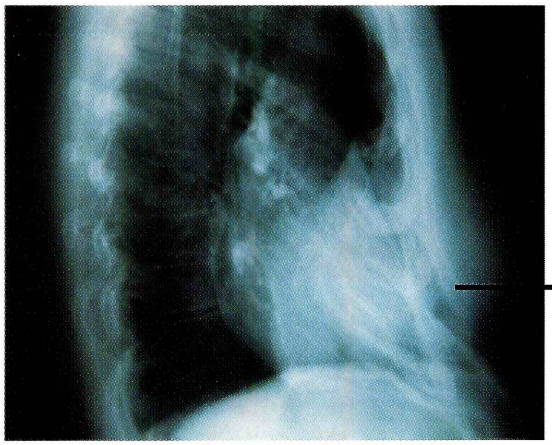
The first documented case of symptomatic relief by surgical correction of pectus occurred in 1913 in an eighteen-year-old male who presented with difficulty breathing and palpitations. Surgery relieved his symptoms and allowed him to return to heavy manual labor. Since this time surgical correction has become the accepted treatment of symptomatic pectus. <u>There is **no** indication for masking this defect with any type of prosthetic insert</u>.

Though young children are often asymptomatic, by early adolescence patients may be aware of a decreased respiratory reserve compared to their peers. Other findings may include 1) decreased cardiac output 2) cardiac arrhythmias 3) cardiorespiratory problems 4) recurrent lower respiratory tract infections or 4) asthma. These signs and symptoms may worsen with exercise and changes in body position.

Though serious complications may occur due to pectus, and are indications for surgical correction, the primary indication for referral to a surgeon is the patient's desire for cosmetic improvement. Patients whose concern over the deformity affect his

continued on next page





sternum

or her self-image, or leads to social withdrawal are candidates for surgical repair, even if the sternal depression itself is mild. Close examination and questioning of both the patient and parents almost always reveals significant evidence of respiratory problems.

Better results are obtained when surgery is performed between the ages of two and five, but severe cases may warrant repair at a younger age. Earlier repair is associated with decreased risk of scoliosis because rotational force is no longer exerted on the spine. Whenever possible, surgery should be performed prior to the child reaching school age in order to decrease psychological stress. Pectus excavatum can be repaired at any age, well into adulthood.

The Ravitch technique used by our group involves making a midline incision over the sternum. The chest muscles are reflected and the cartilage connecting the ribs and sternum are removed down the length of the deformity, much like peeling a banana. The perichondrial wrapping is left intact to form new cartilage within several months. After all costal cartilages and the xiphoid have been removed, the sternum is entirely free except for the sternomanubrial joint. To fix the sternum a transverse osteotomy (fracture) is made below the joint and held in place with trans-sternal sutures. After this has been completed the soft tissue above the muscles and the skin are closed.

The hospital recovery period is usually four to six days. Patients are often able to eat soft foods and walk around the room the evening of surgery. After discharge, patients are strongly encouraged to lift weights to increase the strength of the chest wall muscles.

Physician Assistants Join the Team

In the fall of 2003, Cardiovascular Associates added two Physician Assistants to their team. Nicole Miller and Christy Paragone are each nationally certified and state licensed Physician Assistants. Both graduated from the Physician Assistant program at the University of South Alabama in August 2003.

As Physician Assistants for Cardiovascular Associates, they assist the surgeons primarily in the operating room, provide care for patients in the hospital, and assist postoperatively in the clinic.

The Physician Assistants offer quality care and education to the patients while maintaining constant interaction and guidance from the surgeons. We are excited to have this opportunity to include Physician Assistants on our team as we always strive to improve the quality of care for our patients.

Patient Corner

Kicking The Habit

More than 300 million Americans quit smoking permanently every year and you can too! Here are some tips to help you achieve a healthy smoke-free lifestyle…

- ✓ Pick a target date to quit and commit to it
- ✓ Make smoking inconvenient – don't carry cigarettes with you and smoke only outdoors
- ✓ Change brands before you quit so the cigarettes don't taste as good
- ✓ Try the Caribbean cure: each day save the money you would normally spend on cigarettes and at the end of the year, go on a cruise!
- ✓ When you get the craving, occupy your mouth and hands with things such as gum and crossword puzzles
- ✓ Avoid places and things you associate with smoking
- ✓ Be aware of unexpected situational triggers and stressors and resist the urge to smoke
- ✓ Never believe that "just one cigarette won't hurt." It can and will.

Preventing Arterial Disease

Coronary artery disease, carotid artery disease, and peripheral artery disease all result from the process of atherosclerosis. Atherosclerosis occurs when plaque builds up in the wall of an artery. Plaque is made up of fat deposits and cholesterol which can reduce the flow of blood through an artery. A plaque which may trigger a blood clot will narrow or completely block an artery. This blockage can cause a heart attack or stroke. Peripherally it may cause pain in the pelvis and legs, sores and ulcers, and difficulty walking. The most important preventable cause of atherosclerosis is cigarette smoking.

Cigarette and tobacco smoking is one of the six major risk factors that are associated with coronary heart disease that you can modify and control. Smoking also increases blood pressure, decreases exercise tolerance, and increases the tendency for blood to clot. The most effective way to prevent arterial disease and live a healthier lifestyle is by not smoking.

In Good Hands

Although many think of them simply as *heart surgeons*, the physicians at Cardiovascular Associates are trained in all areas of cardiac, thoracic, and vascular surgery. Their backgrounds include training with the distinguished surgeon Dr. Michael DeBakey of Houston, attendance at various medical schools across the country, and yearly postgraduate courses. All are Fellows of the American College of Surgeons, and hold membership in multiple professional societies.

Michael Damrich, M.D.

- General, vascular, cardiovascular and thoracic training with Dr. DeBekay
- Diplomate, American Board of Surgery, American Board of Thoracic Surgery
- Fellow, American College of Surgeons

Carl Maltese, M.D.

- General, vascular, cardiovascular and thoracic training with Dr. DeBekay
- Diplomate, American Board of Surgery, American Board of Thoracic Surgery
- Fellow, American College of Surgeons, American College of Chest Physicians

Ronald O'Gorman, M.D.

- General, vascular, cardiovascular and thoracic training with Dr. DeBekay
- Diplomate, American Board of Surgery, American Board of Thoracic Surgery
- Fellow, American College of Surgeons, American College of Chest Physicians

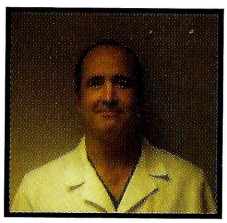
William Higgs, M.D.

- General, vascular, cardiovascular and thoracic training with Dr. DeBekay
- Diplomate, American Board of Surgery, American Board of Thoracic Surgery
- Fellow, American College of Surgeons, American College of Chest Physicians, American College of Cardiology

Dimitris Kyriazis, M.D.

- General, vascular, cardiovascular and thoracic training with Dr. DeBekay
- Diplomate, American Board of Surgery, American Board of Thoracic Surgery
- Fellow, American College of Surgeons, American College of Chest Physicians

David Mull, M.D.



- Cardiovascular and thoracic training at Univeristy of Texas Southwestern Medical Center
- Diplomate, American Board of Surgery, American Board of Plastic & Reconstructive Surgery, American Board of Thoracic Surgery
- Fellow, American College of Surgeons

Connie Pennington

Critical Care Registered Nurse and Master of Science in Nursing

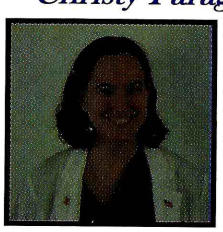
Terri Rice

Critical Care Registered Nurse and Master of Science in Nursing

Nicole Miller

Nationally Certified Physician Assistant

Christy Paragone



Nationally Certified Physician Assistant

Comprehensive List of Surgeries

Cardiac

- *Coronary artery bypass*
- *Repair or replacement of valves of the heart*
- *Repair of congenital defects*
- *Implantation of pacemaker and defibrillator devices*

Vascular

- *Carotid endarterectomy*
- *Repair of abdominal aortic aneurysms/ Endovascular option*
- *Peripheral vascular surgery*
- *Dialysis access grafts*
- *Vascular studies*

Thoracic

- *Repair of chest wall defects*
- *Lung biopsy/Removal of lung lesions/Lung cancer surgery*
- *Esophageal repair/Resection of esophageal cancer*

Other

- *Spinal exposure for neurosurgery and orthopedic surgery*
- *Consultant to hyperbaric and wound care center*

In This Issue..

- Pectus Excavatum
- Physician Assistants join the team
- Preventing Arterial Disease
- Patient Corner: Tips to Quit Smoking

"We provide comprehensive cardiac, thoracic, and vascular care"

CARDIOVASCULAR ASSOCIATES, P.C.
CARDIAC, THORACIC & VASCULAR SURGERY

6701 Airport Boulevard
Suite B-221
Mobile, Alabama 36608
(251) 639-0505

1700 Springhill Avenue
Suite 102
Mobile, Alabama 36604
(251) 438-1200

188 Hospital Drive
Suite 103
Fairhope, Alabama 36532
(251) 928-0707