

What's New in Medicine

Allerslit forte—a high-dose sublingual grass pollen preparation used to treat symptoms of allergy, rhinitis, and conjunctivitis.

Amplatzer muscular VSD occluder—a device placed via a catheter into the muscular ventricular septum in order to close a ventricular septal defect (VSD). In the majority of patients, the implant will permanently close the defect in the heart without open-heart surgery.

Architect Core-M—a lab blood test used to detect antibodies associated with hepatitis B infection.

Arglaes powder—a topical antimicrobial used for negative-pressure wound therapy.

Avastin (bevacizumab)—a drug recently approved, in combination with paclitaxel, for use in treating metastatic breast cancer. It is believed to increase the time the cancer is kept under control and offer a biologic option to women who previously were limited to chemotherapy alone.

AVNRT (atrioventricular nodal re-entrant tachycardia).

Binax Now malaria test—a rapid laboratory antigen test used for detection and identification of the parasites that cause malaria.

cell-enhanced reconstruction—a procedure using adipose-derived stem and regenerative cells with additional adipose tissue for breast reconstruction following partial mastectomy.

Cervarix—a cervical cancer vaccine that shows high levels of protection for up to 6.4 years.

Chariker-Jeter wound drainage kit—a negative-pressure wound drainage kit that makes use of nonadherent, antimicrobial impregnated gauze.

cIAI (complicated intra-abdominal infections).

circumferential pulmonary vein ablation (CPVA)—used to treat paroxysmal atrial fibrillation.

COACH (Coordinating study evaluating Outcomes of Advising and Counseling in Heart failure) trial.

Cordis Enterprise vascular reconstruction device—a self-expanding stent and delivery system used with embolic coils for the treatment of wide-neck, intracranial, saccular or fusiform aneurysms.

Cornet hip resurfacing system—a metal-on-metal resurfacing artificial hip replacement system, surgically implanted to replace a hip joint. It is called a resurfacing prosthesis because only the surface of the femoral head (ball) is removed to implant the femoral head resurfacing component.

CryoCor cryoablation system.

cSSSI (complicated skin and skin structure infections). See *Tyagcil*.

donor white blood cell infusion—used in treating patients with metastatic or unresectable cancer.

DP-CAR (distal pancreatectomy with en bloc celiac axis resection)—a recommended treatment for less advanced carcinoma.

Embeda—a pharmacological abuse-deterrent, extended-release morphine drug. It is an opioid medicine incorporating an abuse-deterrent feature while effectively treating patients with chronic pain.

Endeavor stent—a drug-eluting coronary stent on an over-the-wire delivery system. It is a tiny, expandable, mesh-like tube made of a cobalt-based metal with the drug contained within a thin polymer coating on its surface. The stent is mounted over a deflated balloon attached to the end

of a long thin flexible tube called a stent delivery catheter.

endoglin—a plasma biomarker that may help to predict the spread of prostate cancer to regional lymph nodes.

endovascular vein harvesting (EVH)—endoscopic removal of a leg vein for use as a graft in cardiac bypass surgery. The surgeons use an endoscopic system with a small video camera to remove the vein through a tiny incision near the patient's knee. A surgeon makes 1-3 small incisions, each about 1-2 inches long, then inserts the long, narrow instruments system into the small incisions. The camera projects the image of the inside of the patient's leg onto a TV monitor, helping the surgical team remove the vein. After the vein has been separated from surrounding tissue, the system is used to pull the vein out. The vein is then used as a graft to bypass the blocked artery.

Entereg (alvimopan)—the first in a new class of drugs known as peripherally-acting mu opioid receptor antagonists used for the management of postoperative ileus by accelerating time to recovery of GI function following abdominal or pelvic surgeries.

Epicel cultured epidermal autografts (CEAs)—skin grafts that are sheets of autologous keratinocytes (skin cells) used to replace the epidermal layer of skin on severely burned patients. The patient's own skin cells are grown or cultured from a postage stamp-sized sample of the patient's own healthy skin.

EPITHET (Echoplanar Imaging Thrombolytic Evaluation Trial).

expanded endonasal approach (EEA)—a minimally invasive neurosurgical technique that gives surgeons access to the base of the skull,

See other new, difficult, and hard-to-find medical terms in the electronic 11th edition of *Vera Pyle's Current Medical Terminology* published by Health Professions Institute, 2007.

central brain, and top of the spinal cord by operating through the nose and nasal sinuses. EEA treats once inoperable or hard-to-reach tumors, blood vessel problems, and other conditions in critical areas of the brain, skull base, and spine, typically leaving no scars and fewer, if any, lingering side-effects than traditional craniofacial surgery. Patients can often be discharged within two days. Some procedures require only overnight stays. Also called *endoscopic transnasal brain surgery*.

Exponent stent—a self-expanding carotid stent with over-the-wire delivery system.

FAST (focused assessment with sonography in trauma) **protocol**.

FISH (femoral introducer sheath and hemostasis) **device**—a closure patch used to seal a hole in the femoral artery. It is used to stop bleeding at a puncture site following a catheterization.

fish odor syndrome—a rare genetic condition called trimethylaminuria which causes severe body “fishy” odor. The condition is a recessive inborn error of metabolism. The genetic defect involves an enzyme that breaks down trimethylamine, a byproduct of protein digestion released by bacteria living in the intestines. The diagnosis is made clinically but confirmed by complicated testing of the urine for elevated trimethylamine levels. It can be improved and controlled by a low-protein diet that restricts foods containing choline or trimethylamine oxide.

FLAIR endovascular stent graft—an endovascular system used to treat a stenosis at the venous anastomoses of an A-V access graft.

FLAT (first line ablation therapy)—for treatment of paroxysmal atrial fibrillation. The pulmonary veins are encircled with radiofrequency abla-

tion, using NaviStar ThermoCool catheter and the Carto EP navigation system.

FTIR (Fourier transform infrared)—3-D multivariant image maps of tissue sections.

GeneSearch BLN Test Kit—a qualitative in vitro diagnostic test for the rapid detection of metastases larger than 0.2 mm in nodal tissue removed from sentinel lymph node biopsies of breast cancer patients.

half-top-hat (HTH) configuration—in penetrating keratoplasty (PKP).

Infusion Lipolysis—see *Lipidoctor Mini-Lipo*.

Kremlin wound drainage kit—uses impregnated gauze.

laparoscopic distal pancreatic resection—successfully used to treat solid and cystic tumors of the distal pancreas.

Lipidoctor Mini-Lipo—a limited tumescent liposuction procedure combined with Infusion Lipolysis (a proprietary product). The Mini-Lipo takes 1 to 1-1/2 hours which removes about half the fat of traditional liposuction. The Infusion Lipolysis is then injected to shrink the remaining fat cells and overlying skin over the following months. During the procedure, with the patient fully awake, sterile fluid containing local anesthesia and medication that breaks down fat is injected into the problem area. Then the process is reversed; fluid and fat are slowly and gently removed with a syringe and fine cannula. In subsequent months the patient massages transdermal creams into the treated area every day at home. They contain medications that are said to promote a high rate of fat breakdown, tighten the overlying skin, and block new fat accumulation.

milnacipran—a dual-reuptake inhibitor for the treatment of fibromyalgia syndrome.

Mitroflow aortic pericardial heart valve—a prosthetic heart valve made from bovine pericardium. It is used for the replacement of diseased, damaged, or malfunctioning native or prosthetic aortic valves.

Monolisa anti-HBc IgM EIA—a lab test used to detect antibodies associated with hepatitis B (HBV) infection.

Multi Exchange II (MX2) stent delivery system.

Mynx VCS—a vascular closure system designed to seal a puncture site in the femoral artery and stop the bleeding after a cardiac catheterization procedure. The Mynx VCS uses a balloon catheter and a standard procedural sheath to deliver an extravascular, hydrogel sealant used to seal the puncture site.

nanotechnology terms

atomic force microscope (AFM)
“biobot”
biomotor
carbon nanotube
dendrimer
“flesh welder”
lipid-based nanoparticle system
molecular beam epitaxy
molecular assemblers
nanort
nanobots
nanodevices
nanoengineers
nanofilter
nanogram
nanolithography
nanomachines
nanomaterials
nanomedical
nanomedicine
nanometer
nanomole
nanomotors
nanonephrology
nanoparticles
nanopores

Update

nanorobotics
nanorobots
nanoscale
nanoscale artificial kidney
nanoshells
nanosieve
nanostructures
nanotechnician
nanotube
nanotubules
nanotweezers
neuroelectronic interfacing
photodynamic therapy
polymer-based nanoparticle system
positional assembly
quantum dot (Qdot)
robotic molecular assembler
scanning acoustic microscope (SAM)
scanning tunneling microscope (STM)

NaviStar ThermoCool irrigated-tip catheter—approved for treating patients with type I atrial flutter and drug refractory ventricular tachycardia for myocardial infarction patients. The catheter is approved for use in Europe for endocardial ablation for treating cardiac arrhythmias.

NexGen LPS-flex mobile and LPS-mobile bearing knees—artificial mobile bearing knee systems that are designed to replace the knee joint.

Novation ceramic articulation hip system—an alumina ceramic artificial hip replacement system, surgically implanted to completely replace a diseased or damaged hip joint.

patch and plug repair—a technique to repair groin hernias. The procedure uses mesh to fix the rupture and can be done safely through a 2-inch incision under local anesthesia and allows for a rapid return to normal activities. Other types of repair include laparoscopic repair which can have a higher rate of recurrence and a technique known as “myofas-

cial flap.” These types require general anesthesia.

PhotoSilk Plus pulsed light system—a laser system used in aesthetic therapies, including skin rejuvenation, hair removal, and removal of pigmented lesions and the blush of rosacea.

phalloplasty—surgical treatment for enlarging a micropenis (less than 2 inches in length). In the procedure a flap of skin is taken from the patient’s forearm and shaped into a penis. The original penis is incorporated into the surface of the transplanted skin to maintain erogenous sensation. A urethra is added for urination, and an inflatable penile prosthesis allows for an erection.

Pinnacle hip replacement products.

Prestige cervical disk system—used to replace a cervical disk from C3-C7 following removal of the disk for intractable radiculopathy and/or myelopathy.

Prochymal—an adult stem cell product that has received approval by the FDA as an orphan drug product for the treatment of graft-versus-host disease (GVHD).

ProDisc-C total disc replacement—a device made from metal and plastic that is placed between two adjacent vertebral bodies (neck bones) to replace a diseased cervical disc. It is used in skeletally mature patients for reconstruction of the disc from C3-C7 following removal of the disc at one level for intractable symptomatic cervical disc disease (SCDD).

Proellex—a selective progesterone-receptor modulator (SPRM, anti-progestin) investigated for the treatment of endometriosis and uterine fibroids.

Promacta (eltrombopag)—an oral, nonpeptide platelet growth factor that induces the proliferation and differentiation of cells to produce platelets. While other drugs that restore normal platelet functions are

infusions or injections, eltrombopag is a once-a-day pill. It is very promising in treating patients with hepatitis C having a low blood platelet count.

psychoneuroimmunology—a new field using stress reduction treatment that may prevent cancer cells from taking root again.

RALP (robot-assisted laparoscopic prostatectomy).

Rapid Exchange (RX) stent delivery system.

Realize band—a surgically implanted adjustable gastric device for weight loss in severely obese adults. The Realize band consists of a silicone band, tubing, and an injection port. It is placed around the upper part of the stomach, creating a small stomach pouch that can hold only a small amount of food.

RNFL (retinal nerve fiber layer).

r-TMS (repetitive transcranial stimulation) for Parkinson disease.

Sabril (vigabatrin)—used as a monotherapy for patients with infantile spasms and as adjunctive treatment for adults with refractory complex partial seizures.

SCDD (symptomatic cervical disc disease).

segmental pulmonary vein ablation—an interventional ablation approach in treating paroxysmal atrial fibrillation. It includes either empiric isolation of all pulmonary veins or segmental isolation of only the arrhythmogenic pulmonary veins.

Sepet liver assist device—an extracorporeal artificial liver assist device for blood purification of chronically ill patients suffering from acute liver failure. It is a sterile, disposable cartridge containing microporous hollow fibers with proprietary permeability characteristics. It may be used with standard blood dialysis systems available in hospital intensive care units.

Update

SilvaSorb amorphous hydrogel—a topical antimicrobial used for negative-pressure wound therapy.

single-incision cholecystectomy—removal of the gallbladder through a single ½-inch incision through the navel, instead of the usual 4 incisions on the abdomen. Less scarring and a faster recovery time are advantages of the single-incision procedure.

snap-on teeth—plastic teeth that slide over a patient's own teeth like a glove and snap into place. They are used for purely cosmetic purposes; they do not replace the need for bridgework or fillings. They cost about \$1000 to \$1500 and can be worn when eating soft foods.

sodium stibogluconate combined with interferon alfa-2b—used in the treatment of patients with advanced cancer that has not responded to standard treatment or where there is no standard treatment for this type of cancer.

sugammadex—the first in a new class of drugs known as selective relaxant binding agents designed to reverse the effects of certain muscle relaxants used in general anesthesia. It works in an entirely new and unique way to encapsulate the muscle relaxant molecule and render it inactive.

surgical ventricular restoration (SVR)—a procedure in which surgeons cut open the left ventricle and sew it back together—without actually removing any tissue—to more closely resemble a smaller, normally shaped heart. Often, a patch is sewn over the cut areas to hold the newly shaped heart together. SVR is used in combination with CABG surgery for a better outcome in patients with advanced heart failure. Remodeling the heart can restore the heart to its normal, elliptical shape, lowering the pressure buildup inside the heart cavity, reducing the amount of oxygen and energy needed by the muscle to keep pump-

ing, and allowing the heart to work normally.

TACT (tuned-aperture computed tomography)—3-D mammography which allows radiologists to see tumors within the dense part of the breasts or other regions that otherwise might be obscured by overlying tissues. In mammography, it is used to produce a series of electronic “slices” to look at each portion of the breast in greater detail. TACT reconstructs a 3-D image from a series of 2-D images made from x-rays, nuclear medicine, or even light as seen by a conventional camera.

telavancin—a bactericidal, once-daily injectable antibiotic proposed to treat complicated skin and skin structure infections (cSSSI) caused by gram-positive bacteria, including resistant pathogens such as methicillin-resistant *Staphylococcus aureus* (MRSA).

thalidomide and topotecan—combination chemotherapy considered a safe and effective treatment for women with recurrent ovarian cancer.

3M Cavilon No Sting Barrier Film—a skin prep or barrier wipe that is used under the drape after wound cleansing.

TILK (“tuck in” lamellar keratoplasty) (Oph)—a procedure for corneal ectasias involving corneal periphery.

TIPPS (transilluminated powered phlebectomy)—a minimally invasive procedure using smaller and fewer skin incisions to remove varicose veins. The veins are removed using a small telescope-like device. It is said to result in less pain, improved cosmetic results, decreased incisions, decreased operating room time, and minimal complications.

Treanda (bendamustine HCl)—an injection for the treatment of patients with indolent B-cell non-Hodgkin's lymphoma who have progressed during or following

treatment with rituximab or a rituximab-containing regimen.

Tri-Lock bone preservation stem—a new tapered-wedge titanium stem that minimizes the amount of bone that needs to be removed during hip replacement surgery, while promoting stability, preserving the natural anatomy and restoring hip function.

trimethylaminuria—see *fish odor syndrome*.

Tyagcil (tigecycline)—an IV antibiotic with a broad spectrum of antimicrobial activity, including activity against the drug-resistant bacteria methicillin-resistant *Staphylococcus aureus* (MRSA). Tygacil is used for the treatment of complicated intra-abdominal infections and complicated skin and skin structure infections in adults.

UHR (ultrahigh-resolution) **optical coherence tomography**—for detection of retinal nerve fiber layer loss in eyes with band atrophy of the optic nerve.

UltraShape—a device that offers a noninvasive fat reduction and body contouring solution for men and women that uses nonthermal, selective, focused ultrasound to break down stubborn fat deposits. The machine is computerized and delivers a uniform ultrasound pulse over the treatment area, which lasts about 90 minutes. The energy is aimed at the fat cells in a certain area. The released fat is then recycled by the body.

Wooding-Scott drainage/irrigation kit—a negative-pressure wound drainage system that uses antimicrobial gauze.

xTAG respiratory viral panel (RVP) assay—a device that can simultaneously detect and identify nucleic acids of multiple respiratory viruses in nasopharyngeal swab specimens from individuals suspected of respiratory tract infections.