

COMPLIMENTARY ISSUE

Something More

for you

THE OSTEOPATHIC PATIENT

VOL. 11, ISSUE 1, 2009

OUR TWENTIETH ISSUE!

**Thyroid Disease
and Treatment**

Treating MRSA

**Hope for
Postpartum
Depression**

**Anger: How are
you managing
it?**

**20 great tips
from our 20
issues!**

*Jonathan Lara, DO, specializes
in Otolaryngology and Head
and Neck Surgery at Carlson
ENT in Tucson*



Tucson Osteopathic Medical Foundation

Something More is designed for a very exclusive clientele—patients of osteopathic physicians in Arizona. If you are reading it now, that probably means you are part of this select group.

Osteopathic doctors are trained to look at the whole person, all the time. Every aspect of your health is of interest to them, not just the problem of the moment. That is why Something More has so many different articles about so many different things. And they are for the most part short and easy to read, because this is a waiting room magazine and most DOs don't make you wait very long to see them.

This is our tenth year of publication. We have been around for you that long because others have told us they like the magazine and what they learn from it. Doctors like it to for the same reasons. I hope you do too.

Lew Riggs, Ed.D.
Executive Director
Tucson Osteopathic Medical Foundation

The mission of the Tucson Osteopathic Medical Foundation shall be the achievement of excellence, innovation and caring in advancing community health care issues, enhancing medical education and developing sustainable support of projects which impact the lives of many today and in the future.



Lew Riggs, Ed.D.
Executive Director

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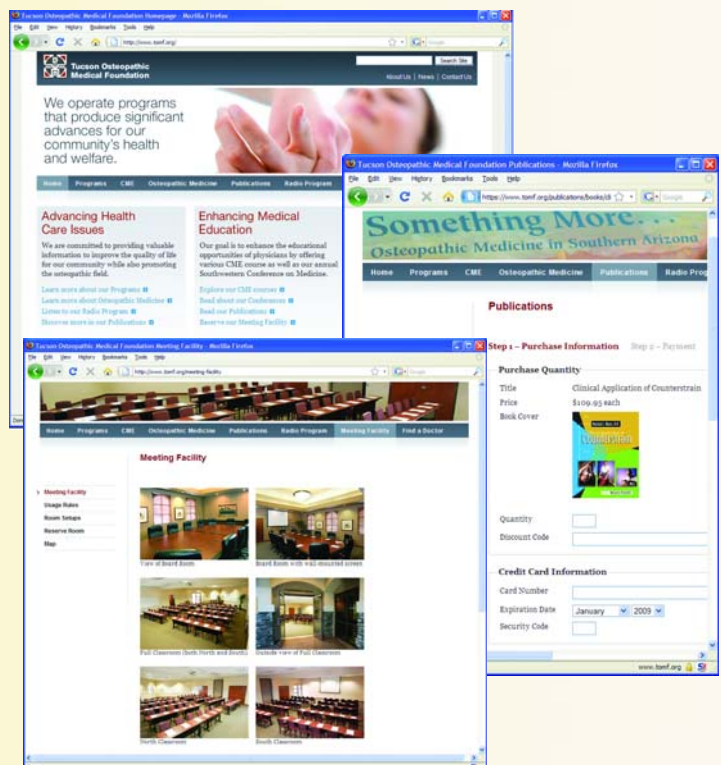
We are Pleased to Announce the re-launch of our Website

After months of work our new website is finally up and running! We are very excited about the new look and various updates, and we invite you to explore for yourself at www.tomf.org.

We are working hard to make the changes that will best serve you. Our webstore has been completely redesigned and updated to make purchasing our book, *Clinical Application of Counterstrain* easy and intuitive. In addition, we're now offering online registration for all of our CME events, and you can also register more than one attendee at the same time for your convenience.

Last but not least, you are now able to reserve our meeting room facilities directly through our site! Pick the room, dates, and configurations you want all on the web and have the flexibility of either paying a deposit or the full amount up front. Our site now has the ability to accommodate your needs!

Again, we are very excited about the new site at www.tomf.org and hope you will enjoy the new flexibility it provides. Please feel free to contact the Foundation at 520-299-4545 or info@tomf.org with any feedback you may have.



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Find a DO with this list of practicing osteopathic physicians in Tucson.

cover photo: David Sanders

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ANGER MANAGEMENT:

CONTROLLING ANGER BEFORE IT CONTROLS YOU

by Lee Allen

I'm not an expert on anger, but I've been mad before so I've got some experience on the subject," says forensic psychiatrist Robert McCabe, DO. The modest statement belies his three-decade-long career that encompasses keynote speeches at international conferences and nearly 300 published abstracts. Currently the adult psychiatrist for COPE Behavior Health, McCabe has worked with all kinds of angry patients, from California prison inmates to the indigent mentally ill in Arizona.

"Anger is a natural emotion," he says, "one of the normal, basic reactions like happiness or excitement." The American Psychological Association defines anger as "an emotional state that varies in intensity from mild irritation to intense fury and rage," and McCabe has seen both ends of that spectrum.

"It's part of our mental makeup to feel angry when something doesn't go our way or someone gets in our face," says McCabe,

refining his response further by noting that anger can be an unpredictable and powerful emotion. "The expressing of anger is one thing. Containment of that expression is another."

An online anger management toolkit (www.angermgmt.com) somewhat simplistically classifies anger into five general categories:

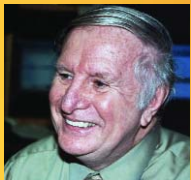
- (1) Anger at others. (2) Others' anger at us.
- (3) Anger at ourselves. (4) Residual past anger.
- (5) Abstract anger.

McCabe is a bit more specific: "There are some criminal-minded, anti-social, bad-seed people who flat out want their own way, want it now, and react very negatively when their needs are not met. A second group involves youngsters who exhibit almost the same type

of behavior. If they can't have what they want, they'll make life miserable while trying to achieve their goals. A third category involves the severely mentally ill who don't know what reality is, so it's hard for them to give and take because they don't understand the process. The fourth group, and this is a big one having a lot to do with criminals, involves substance abuse. We have areas in our brain that act like a brake. When we want something, don't get it, and things start to get out of hand, the brake goes on and we slow things down. Alcohol and drugs just numb that area and take those brakes off."

ANGER:

"AN EMOTIONAL STATE THAT VARIES
IN INTENSITY FROM MILD IRRITATION
TO INTENSE FURY AND RAGE"



*"People who
have an anger-
management
problem need to
admit it and
seek out some
help. You can*

*push somebody only so far before love can
disappear;" says forensic psychiatrist
Robert McCabe, DO.*

He's seeing more examples of anger expression because of the complexity of who we are as a society. "There's more hostility in the world today. We live in a 'bring-it-on' mentality," he says, sighing. "I think the loss of our past somewhat simplistic, rural-based lifestyle contributes to stress that builds to frustration and then boils into anger. Something I read recently indicated that if you were on a tropical island by yourself and

you had food, housing, and companionship, then there should not be any anger. When you put people together in a crowded environment, you end up with a situation where there are too few resources and too many individuals demanding them. There are basic societal rules that some people try to circumvent or go beyond. So the larger the civilization, the more people you have in the equation, the greater the chance that somebody will interfere with your pursuit of happiness or what you think life ought to be."

Although there is no formal 10-step program or any kind of explicit ABC acronym for anger management, there are some recommended actions to acceptably deal with the emotion and keep it under control. "The three main approaches are expressing, suppressing, and calming," says psychologist Charles Spielberger, APA anger specialist.

"Expressing angry feelings in an assertive, but non-aggressive, manner is the healthiest way. You make clear what your needs are and how to get them met without hurting others.

"Anger can also be suppressed, then redirected, converted into more constructive behavior," Spielberger says, "although unexpressed anger can create other problems such as passive-aggressive behavior or a perpetually cynical and hostile personality. Thirdly is the simple act of calming oneself down, not just control of outward behavior but lowering heart rate and letting feelings subside."

"There are all kinds of anger management courses, some praised as providing solutions, others decried for their lack of real behavior-changing assistance," says McCabe, who has his own opinions on the subject. "As cognitive beings, we can learn through a variety of mechanisms how to cope with anger. One way is to step back from a situation, think about it, then express our feelings in such a way as to not trigger the other person and create animosity. Try to relax with deep breathing

Health News Notes

Hazardous Air Fresheners



A study of six air fresheners and laundry detergents revealed that five contained hazardous air pollutants—chemicals that aren't listed on the labels of such products, according to the Environmental Impact Assessment Review.



Ineffective Ginkgo

Ginkgo biloba—an herbal supplement often taken in hopes of improving memory and cognition—doesn't help prevent Alzheimer's disease or other forms of dementia, according to long-term study in the Journal of the American Medical Association.

Web Surfing's Brain Benefits



Web surfing isn't only for the young. Seniors who surf the web show increased brain activity in areas dedicated to reasoning, decision-making, memory, and language, according to a UCLA study—at least if they already have some previous internet experience.

THE THREE MAIN
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AND CALMING

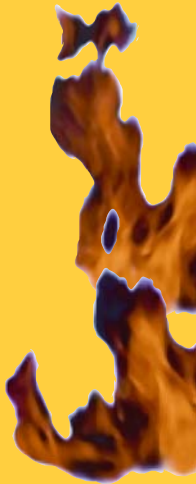
INTERNALIZED, REPRESSED
ANGER IS A NEGATIVE WHICH
FREQUENTLY PRODUCES
DEPRESSION

or serene imagery. When I get angry, I either try to physically walk away from the situation or turn it into something humorous. When my anxiety gets bad—and anger produces anxiety—I joke my way out of the problem, venting in a way that doesn't generate additional anger."

McCabe does warn that when emotions cool down and calm returns, the problem should be re-addressed in an attempt at resolution. "If you bottle these things up, they don't go away, they just keep coming back, and internalized, repressed anger is a negative which frequently produces depression."

If incidents of anger are out of control and are having an impact on relationships, it may be time to consider counseling to develop techniques that can change thinking and

behavior. "People who have an anger-management problem need to admit it and seek out some help," says McCabe. "A lot of people don't, and some of them are in relationships where a spouse or children have to bear the brunt of that anger. You can push somebody only so far before love can disappear. It's much better to seek out help before that happens or before anger leads to aggression and somebody finds themselves sitting behind bars. If you have the symptoms and don't think you can do anything about it yourself, you need to seek out some professional help." ♦



Taming TOXIC emotions

ENVY



► When it's a problem:

Short, intermittent envy is pretty ordinary, not good, but ordinary. But if your envy causes you to badmouth or deride the objects of your jealousy, you have a few issues. Envy is an emptying emotion—even if you were to acquire what you envied in someone else, you'd likely start feeling envious about something else. It's a bottomless pit.

► Solution:

It won't be easy, but try to befriend the person you resent or try learning from the person you envy. See if what he or she has is really important to you. Also, stop looking outside for validation. Pinpoint five or six things that make you unique and start appreciating them.

FEAR



► When it's a problem:

In its less harmful form fear can disappear as quickly as it appeared. But the chronic variety can create anxiety, social paralysis (like not wanting to take chances or try something new), or lead to anger or hatred.

► Solution:

Fear is talking to you all the time. A key to drowning it out may lie in simply talking back. When we think something and speak it, our minds shift and our bodies respond. Positive self talk also helps build courage.

HATRED



► When it's a problem:

In its passive form, fear may cause you to ignore or avoid the person you hate. But, the aggressive kind can lead to physically harming the person. Hatred also carries with it physical side effects, such as cardiovascular problems, high blood pressure, ulcers and headaches.

► Solution:

If thoughts are becoming obsessive, you need to get a little perspective. Forgiveness may help. If you're harboring thoughts of doing some ill deed, however, you may want to speak to a counselor to get to the root of your feelings.

GUILT



► When it's a problem:

Brief guilt over a specific act isn't toxic. But recurring, or long-lasting guilt can eat you up inside. It can lead to depression, anxiety, a sense of worthlessness, leading to negative internal dialogue. A specific act suddenly becomes a blanket indictment of you as a parent, daughter, colleague, or friend.

► Solution:

Try to forgive yourself and focus on the things you do well. You will make mistakes, and you can't be all things to everyone. It's a slow process, so navigate it with patience. If an underlying cause is to blame—like low self-esteem or perfectionism—a therapist can, through various methods of therapy, help you to resolve those issues.

BEST 20 TIPS

1

Get walking. So long as you have good walking shoes, just get up and go for a stroll. You don't need any special equipment and it's a great way to get your heart rate up.



2

Something sweet for diabetics? Research has shown that ordinary cinnamon may help delay or prevent the onset of Type 2 diabetes.



A banana a day keeps high blood pressure away. The National Heart, Lung, and Blood Institute says that a diet rich in potassium can help prevent high blood pressure.

3

4

Chances are you're not getting the water you need. Eight glasses of water a day is just the starting point! In addition, stay away from caffeine. It's a diuretic that can speed up dehydration.



Superfabulous superfood? Quinoa is a seed (similar in appearance to couscous) that is packed full of protein. The best part? It can be found at most grocery stores and easily prepared in a rice cooker. Try it for breakfast with a little honey and cinnamon and watch your energy levels increase.

5

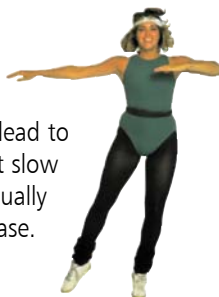


Beware of fad diets. If it sounds too good to be true, it probably is. Any diet that promises fast weight loss, lists good and bad foods, or trumpets other miraculous claims should be avoided.

6

7

Don't overdo your exercise. Doing so can lead to injury. Start slow and gradually increase.



8

The benefits of breast feeding don't end when infants take to solid food. Studies have shown that breast-fed babies are less likely to grow into overweight teens.



9



Not all fruit juices are created equal. Be sure to check the labels to make sure the beverage is 100% fruit juices. Some of your favorites might only have 5 to 10%!

Beware of belly fat. Belly fat carries higher risks for cardiovascular disease than other types.

10



FROM OUR 20 ISSUES

11

Work it out! A study published in the New England Journal of Medicine showed that men with the greatest ability to exercise had half the death rate of those with the least ability—even after accounting for risk factors such as obesity and heart disease.



Scientists at Hebrew University in Jerusalem have identified a brain-chemistry gene that may be linked to post-traumatic stress disorder, suggesting that heredity has a significant role.



12



Eat your yogurt! Researchers at Emory University have found that certain gut bacteria, like the kinds found in yogurt, lessen intestinal irritation by blocking the inflammatory response.

13

14

Ladies, remember to regularly perform breast exams. Seventy percent of breast cancers are found through self-exams.

70%

15



Don't sit up so straight! Slouching may be good for you, at least if you lean backward instead of forward. Leaning back puts less strain on your spine than sitting tall, according to researchers working at Woodend Hospital in Aberdeen, Sweden.



Taking an hour or two out for a nap could save time over the long run, at least if you're trying to commit tasks to memory. Study subjects had a better chance of remembering what they learned if they took a 90-minute nap afterwards, according to Nature Neuroscience.

16

17

While varicose veins are largely genetic, some preventative measures can be taken.

A diet high in fiber and low in salt can discourage water retention. Also, changing position every 30 minutes helps with circulation along with other leg exercises.



Avoid injuries while exercising. Always make sure you stretch properly before beginning any physical activity.

18



19

Increased exposure to light really does alleviate both seasonal affective disorder and mild to moderate non-seasonal depression, according to a review of past studies by the American Psychiatric Association.



20



Want to shed extra pounds? Nix the soda! Soft drinks are now the leading source of calories in the U.S. diet, according to researchers at Tufts University. The drinks account for 14 percent of the total calories consumed by those who drink them.

When baby makes you blue

by Karen Wood

When Tom Cruise criticized Brooke Shields for taking antidepressants after the birth of her first baby—advocating vitamins and exercise instead—he actually did new mothers a favor. Because of the highly publicized 2005 spat between the two movie stars, a potentially serious and seriously underdiagnosed condition hit the spotlight. Putting a beautiful movie-star face on postpartum depression helped legitimize the disorder and highlight treatment options.

Postpartum mood disorders—which can range from the mild "baby blues" to a dangerous condition called postpartum psychosis—are fairly common. Some 80 percent of new moms will experience the baby blues, a condition which goes away by itself. But 10–20 percent find themselves with postpartum depression, a more serious condition that may not end without treatment and can affect a mother's ability to cope and to bond with her child. Rarer still is postpartum psychosis. It occurs in 1 or 2 in 1,000 births, causing mothers to hallucinate, hear voices, exercise poor judgment, or—in the worst cases—seek to harm themselves or their babies.

There has been an increased push in recent years to screen for and treat pregnancy-related depression, says DO Jeffery Palen, an obstetrician/gynecologist. Because this type of depression is associated with the birth of a baby—widely considered a joyous event—new

moms often feel guilty about feeling sad and overwhelmed. He tries to reassure his patients that being depressed doesn't indicate weakness. "I tell them 'It's very common, you haven't done anything wrong...'" Normalizing those feelings is important, agrees psychiatrist Deborah Fernandez-Turner, DO, medical director of Pantano Behavioral Health Services. "Helping mom understand that depression is okay, that it doesn't mean she's a bad mom, that her feelings are logical." Sometimes relieving that guilt through therapy can make medication unnecessary.

Suffering in silence is harmful—and unnecessary—for mother, child and family. "Why should someone be so miserable for such a long period of time when it's so treatable?" says Fernandez-Turner.

A photograph of a woman with dark hair, seen from the side, holding a baby. The woman is looking down at the baby with a gentle expression. The baby is looking directly at the camera. The image has a soft, slightly desaturated color palette, with the woman's skin appearing in warm tones and the baby's skin in a lighter, more neutral tone. The background is a plain, light color.

Genetics plus environment

Postpartum mood disorders have multi-faceted causes. Hormone changes, a history of depression, the physical demands of pregnancy and delivery, a poor support system, and the stress of caring for a newborn can trigger depression. "We see an inability to function, doing only the bare minimum to get by, crying all the time, not eating, not sleeping or sleeping too much, guilt feelings..." says Fernandez-Turner.

Women with severe PMS or a history of depression are especially at risk. "If you're predisposed already, a pregnancy has the potential to tip you back into that



depressive state again," she says. "These are people that we watch very closely during the pregnancy and after their pregnancy."

Because of pre-existing depression, some women take antidepressants during the pregnancy: they weigh the risks and benefits to themselves and their baby. Palen says that although there may be slight risks to the fetus, they are rare. And the benefits outweigh the risks. "If a woman's not going to take care of herself, she's not going to take care of her baby, so we use them when we have to."

And that's why trying to tough it out is a bad idea, both for mother and baby. Studies have shown, says Fernandez-Turner, that the mother/baby bond during the first few months of life is critical to a child's social and emotional development. "If a mom is unable to interact, it really does have an impact on a child's mood, behavior and sense of security—without that, the child is much more likely to have symptoms of anxiety."

Learning how to feel better

Treatments range from nutritional supplements and yoga classes to psychiatric counseling. Taking fish oil supplements is a healthy and risk-free course of treatment that may benefit both mother and baby, says Fernandez-Turner. Women may experience low thyroid levels after pregnancy, causing depression, and that also is easily treated. A healthy diet, vitamins, support of family and friends, acupuncture, creative outlets—all are helpful.

...being depressed doesn't indicate weakness.

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When those courses fail, medication, counseling, and support groups can work. "The first thing I do is recommend getting in contact with a support group—oftentimes with mild forms of depression, you can avoid medication altogether. Get some rest, get a babysitter, get a little break," says Palen, who has a large family himself. "A well-balanced diet, exercise, whatever you can do to feel better is going to help."

As a psychiatrist, Fernandez-Turner sees the more serious and persistent forms of postpartum mood disorders. One mother had increasingly severe depression, never treated, with each child. After the third one was born,

she snapped. She tried to feed her newborn pizza, becoming angry when the baby wouldn't eat it. She also expected the infant to be able to sit up and walk. Diagnosed with postpartum psychosis, the mother was hospitalized and treated with antipsychotic drugs. "Once she started medication and the psychotic symptoms went away, she went back to being herself, which was a great mom and a nice person," said Fernandez-Turner.

The wisdom of experience

Hospitals throughout Tucson—including Tucson Medical Center, Northwest Medical Center, and St. Joseph's Hospital—offer weekly support groups where moms can talk about their lives. The discussion moves from being overwhelmed by caring for a sick child and sleepless nights to not wanting to be pregnant,



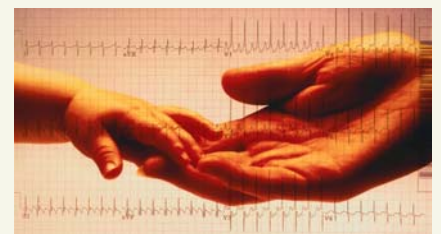
Flu Shot Benefits

Getting a flu shot isn't just good for you—it's good for your community. When an Ontario, Canada program offered free flu shots, vaccination rates increased and flu-related deaths declined, even among those who didn't receive the shots themselves.

Inherited Immunity

Pregnant women who get flu shots also pass the vaccination's immunity on to their newborns, according to the *New England Journal of Medicine*.

Treat HIV Positive Babies Early



HIV positive babies have a better chance of survival if they receive drug treatment as soon as possible, rather than waiting until they show symptoms, according to the *New England Journal of Medicine*.



Hospitals throughout Tucson offer weekly support groups

where moms can talk
about their lives.

and trying to behave rationally when stressed—"That's it. I have only one black sock. I'm not going to work." The women, several of whom are holding babies, offer suggestions and comfort to each other. "Nothing prepares you for newborns," says one mom. "Reach out to friends with kids. They'll be lifelines for you."

When it is her turn to talk, a young woman holding a whimpering infant starts out calmly. "My baby is six weeks old with colic. That's part of the reason I'm less than happy being a mom." Her voice falters. "Sometimes I just wish she would be quiet. I wish I could tell her but I know she can't understand. I have to go in the

bathroom and cry. It would be a lot better if I could get some sleep but that's not going to happen. I slowly see myself going crazier and crazier. I know in my right mind there's no reason to feel this way but I can't stop feeling this way." By this time, the baby is squalling and another mother offers to hold her, rocking and cuddling as the conversation continues.

The group leader steps in. "You will get through this. You need support, you can't do it alone. You're having a normal reaction to sleep deprivation. Can your mother help?" Another mother suggests "Dr. Brown's bottles—within a week, the colic was gone. It was a lifesaver."

The women talk candidly about being unprepared, about being bored, frustrated, angry, and sad. "I had lots of experience and nothing came easy," said one of the older

mothers. "And overnight your whole life is over—I'm still struggling with that. I look at my friends and they have the life I used to have."

But the tears gave way to laughter and blame was quietly deflected. "She won't remember that you didn't know how to change her diaper," said one. "It will be a lot more fun and a lot easier, I promise," said another. One mother, whose son is now three, offered perspective: "As you get older and you see things through her eyes... I wouldn't go back for anything." ♦



SAVE THE DATE

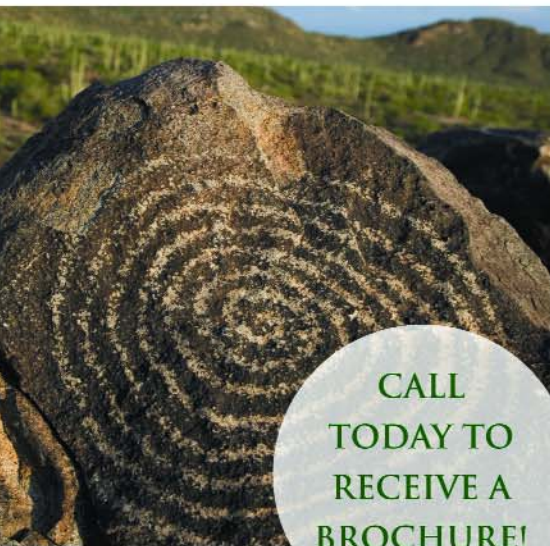
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MRSA

Methicillin-Resistant Staphylococcus aureus

by Mark Flint

In ancient times, healers used old bread as a poultice on wounds. They knew it had a healing effect, but likely were oblivious to the role mold on the bread played in curing infection.

As medical research grew, mold got more attention. When Alexander Flemming in 1928 discovered the mold that would become penicillin, the age of antibiotics began in earnest. Antibiotics were considered by some

to be the "magic bullet," a discovery that would end disease for mankind.

While antibiotics have been magical in many respects, their effect has been blunted because some bacteria can mutate and become resistant to antibiotics.

One such bacteria, a form of staphylococcal infection, has become of particular concern to the medical community. Methicillin-Resistant Staphylococcus aureus (MRSA) is resistant to methicillin and other more common antibiotics such as oxacillin, penicillin and amoxicillin. Staph infections, including MRSA, occur more frequently among persons in hospitals and healthcare facilities (such as nursing homes and dialysis centers) who have weakened immune systems.

MRSA in the Community

MRSA has cropped up in environments where people come into frequent close contact, such as schools. Known as Community-Associated (CA)-MRSA, these infections usually take the form of skin infections that may look

Community-acquired MRSA is in some ways worse than its hospital-acquired counterpart because it has acquired and uses a toxin not found in the hospital-acquired form.





Staph infections, including MRSA, occur more frequently among persons in hospitals and healthcare facilities (such as nursing homes and dialysis centers) who have weakened immune systems.

like simple pimples or boils. They quickly become painful with draining pus.

"Community-acquired MRSA is in some ways worse than its hospital-acquired counterpart because it has acquired and uses a toxin not found in the hospital-acquired form," said Marc Epstein, DO, of Mountain View Dermatology, LTD, in Tucson. "This toxin allows the (CA)-MRSA to burrow and cause a lot more destruction."

Dr. Epstein said untreated MRSA can get

into the bloodstream and infect bones, lungs and the heart. Physicians should take cultures of skin infections before treating them, he noted, so that they can confirm that the bacteria causing the infection are sensitive to the antibiotic they have chosen.

"We are seeing MRSA in impetigo (a contagious skin infection common among children), and in people who are otherwise healthy," Dr. Epstein said. "Sometimes it is very aggressive, and sometimes not. I had

one patient come in with what looked like a ruptured cyst that turned out to be a MRSA infection that had penetrated into the fat under the skin."

According to the Centers for Disease Control (CDC), an estimated 94,630 people developed a serious (invasive) MRSA infection in 2005. Approximately 18,650 persons died during a hospital stay related to serious MRSA infections.

While community-associated MRSA presents a growing and serious health threat, the CDC reported that about 85 percent of all invasive MRSA infections were associated with healthcare. Only a third of them occurred in hospitals, with the remainder in healthcare facilities such as assisted living centers.

How MRSA Spreads

In healthcare settings, patients who have MRSA or who carry the bacteria on their bodies but do not have symptoms (colonized) are the most common sources of transmission.

The primary mode of transmission to other patients is through human hands, especially healthcare workers' hands. Hands may become contaminated with MRSA bacteria through contact with infected or colonized patients. Healthcare workers can prevent the spread of MRSA by taking care to perform appropriate hand hygiene, such as washing with soap and water or using an alcohol-based hand sanitizer.

Carriers with colonized infections, combined with inadequate hygiene, represent an insidious threat in the community as well, noted Dr. Epstein. The bacteria, which can colonize and thrive in moist areas such as the nasal cavity, can be spread easily.

"A person carrying MRSA can work out at a gym, for example, rub his nose and then transfer some bacteria to the equipment handle," he said. "Then someone susceptible uses the equipment, picks up the bacteria and scratches their skin, especially if it's already traumatized with a cut or an abrasion. That could be all it takes to become infected. People need to take care and use proper hygiene in those environments."

A person carrying MRSA can work out at a gym, for example, rub his nose and then transfer some bacteria to the equipment handle.



Congested public areas such as schools are particularly vulnerable to outbreaks, Dr. Epstein said, because of the combination of frequent contact and unfortunately poor hygiene practices. Lack of good hygiene practices may be the primary reason the disease has spread so much, Dr. Epstein said.

"People need to perform more hand washing, in bathrooms, when in public places and when touching things many other people put their hands on," he said. "If you handle money you should wash your hands. Surfaces that look harmless could be teeming with

bacteria—countertops, tabletops at a restaurant, chrome handles on buses, and even store merchandise."

MRSA infections aren't usually epidemic, but everybody should take the potential for infection seriously, Dr. Epstein said. Preventing outbreaks is as simple as good hygiene—such as washing your hands after going to the bathroom.

"We've seen a breakdown in communicating the need for good hygiene," he said. "People need to care for themselves better, to take more responsibility for their own health. We need more hygiene instruction in schools."

What Type of Infections Does MRSA Cause?

Most Community-Associated MRSA infections appear as pustules or boils that can be red, swollen, painful, and with drainage. They commonly occur at sites of skin injury, such as cuts and abrasions, and areas of the body covered by hair, such as the back of the neck, groin, buttocks, armpit and beard area of men.

Almost all MRSA skin infections can be effectively treated by drainage of pus with or without antibiotics. More serious infections, such as pneumonia, blood-borne infections, or bone infections, are very rare in healthy people who get MRSA skin infections and seek treatment in a timely manner.

How is MRSA Transmitted?

MRSA is typically transmitted by direct skin-to-skin contact or contact with shared contaminated items or surfaces.

How can I Protect Myself From MRSA?

You can reduce your chances of getting MRSA by:

- Practicing good hygiene, especially frequently washing your hands with soap and water (or using an alcohol-based hand sanitizer), and by showering immediately after exercise
- Covering abrasions and cuts with a clean dry bandage until healed
- Avoiding sharing personal items such as towels and razors that come into contact with bare skin
- Using a barrier (clothing or a towel) between your skin and shared equipment such as gym equipment
- Establishing cleaning procedures for frequently touched surfaces and surfaces that come into direct contact with people's skin

While MRSA skin infections can occur anywhere, some settings have factors that make transmission easier. These factors, which the CDC refers to as the 5 C's, are: Crowding, frequent skin-to-skin Contact, Compromised skin (cuts or abrasions), Contaminated items and surfaces, and lack of Cleanliness.

Schools, dormitories, military barracks, households, correctional facilities, and daycare centers are among the non-healthcare locations where these conditions may be found. ❖



Cyclists Find Safety in Numbers



The more bicyclists on the road, the safer riding becomes. Doubling the number of bicycles decreases the chance of any individual bicyclist being hit by a car by a third, according to a cycling seminar in Sydney—perhaps because drivers become more used to watching out for the cyclists.



Setting Fitness Standards

How much exercise is enough? The U.S. Department of Health and Human Services' new guidelines recommend at least 150 minutes of moderate aerobic exercise—or 75 minutes of more vigorous aerobic exercise—per week for adults, combined with a couple of days per week of muscle-strengthening work. The numbers go up for children, who should get at least an hour of physical activity every day. Feeling strapped for time? Neither adults nor children need get all their exercise at once—it can be broken down into chunks as small as 10 minutes throughout the day.

MRSA:



The "Age of Antibiotics," which led to a significant increase in life expectancy, could be giving way to an age of antibiotic-resistance with a significant decrease in life expectancy. Once considered a miracle discovery, antibiotics have been losing ground to mutating bacteria that no longer respond. Infectious disease mortality rates have risen sharply, with more than half of those deaths attributed to antimicrobial resistance.

A recent report, "Bacterial Resistance to Antibiotics" by the Todor University of Wisconsin–Madison Department of Bacteriology notes that "about 70 percent of the bacteria that cause infections in hospitals are resistant to at least one of the drugs most commonly used for treatment."

Among the diseases that have become increasingly difficult to treat are infections such as MRSA, *Clostridium difficile* (C. diff), an intestinal tract infection in people taking antibiotics or other antimicrobial drugs), gonorrhea, tuberculosis, typhoid fever, diphtheria, pneumonia and septicemia.

Most frustrating to people treating these conditions is the fact that public policy, or lack of it, is in large part responsible for our inability

to better combat these diseases. Among the factors that have helped create this crisis are:

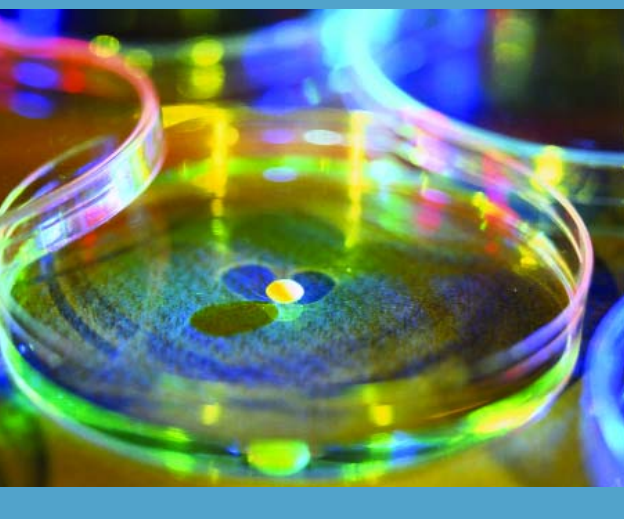
Use of antibiotics in livestock and poultry feed

Livestock producers discovered that including sub-therapeutic levels of antibiotics in feed caused animals to grow faster, produce more meat and reduce illness. An unfortunate side effect has been a contribution to antibiotic-resistance.

The University of Wisconsin–Madison report notes that agriculture is responsible for more than 60 percent of antibiotic use in the United States—representing 18,000 tons per year added to the antibiotic burden in the environment.

Efforts to ban this practice have not succeeded, but many people are "voting with their checkbooks" by buying meat from producers who don't use antibiotics.

THE IMPACT OF RESISTANT BUGS



Over-prescribing and mis-prescribing antibiotics

"It's a common misconception that antibiotics treat all types of infection," said Marc Epstein, DO, of Mountain View Dermatology, LTD, in Tucson. "Antibiotics work only on susceptible bacterial infections; they were never intended to treat viral infections."

Secondary bacterial infections can occur during viral diseases such as influenza, but people suffering from the flu often pressure their doctors to prescribe antibiotics. Doctors, forced to practice defensive medicine often feel they have to comply. Often, Dr. Epstein said, for a common cold or flu, decongestants and other non-antibiotic medications are all that are needed, and can help avoid secondary infections.

Dr. Epstein recommends taking cultures before initiating antibiotic treatment to identify the infectious agent and to confirm which antibiotic will be most efficacious in treating the infection. "If you do not take a culture and the patient doesn't respond you won't know whether it's because it's not a bacterial infection or it's a resistant strain of bacteria," Dr. Epstein said.

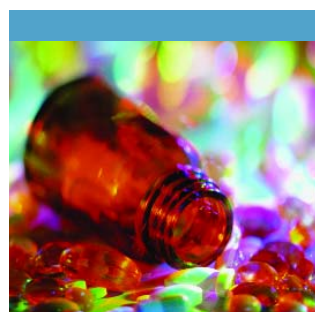
It's About the Money

Publicly held pharmaceutical companies have a responsibility to maximize profits for stockholders. Too often, this responsibility can be in direct conflict with good public health policy. In the case of drug resistant disease, drug manufacturers have less incentive to do research and dedicate less to development funding toward finding a cure.

The reason, Dr. Epstein explained, is basic economics.

"You get over an infection," he said. "You don't get over high blood pressure, high cholesterol or heart disease. These chronic diseases require ongoing medications for the life of the patient."

"A successful antibiotic can make millions for a drug company, but a successful drug for a chronic condition can make hundreds of millions," he continued. "That's the dilemma."



A Cost We All Share

People infected with antibiotic-resistant organisms are more likely to have longer and more expensive hospital stays, and may be more likely to die as a result of the infection. When the drug of choice for treating their infection doesn't work, they require treatment with second- and/or third-choice medicines that may be less effective, more toxic and more expensive.

In addition to more suffering and higher mortality rates, Americans pay more as antibiotic resistant bacteria proliferate. The higher costs result from the increased burden and expense to the healthcare system needed to treat these infections and their complications. ♦

Detecting and Managing Thyroid Disease

by Janni Lee Simner

Elizabeth McCoy had an underfunctioning thyroid for at least a year before she was diagnosed. "I thought that I was 'naturally' fatigued all the time," she says. McCoy's thyroid disease reached diagnosable levels with the birth of her daughter, but in retrospect she suspects it may have been present as early as her teens. Only after McCoy's own mother was diagnosed with hypothyroidism did McCoy have her thyroid function tested—and learn that she, too, was producing clinically low levels of thyroid hormone.

McCoy isn't alone—according to the American Association of Clinical Endocrinologists (AACE), as many as 27 million Americans have some form of thyroid disease, and more than half of them are undiagnosed.

"The thyroid is a shield-like gland just over the voice box at the front of the neck," explains Jonathan Lara, DO, an ear, nose, and throat surgeon focusing on facial plastic surgery and head/neck surgery. That gland produces hormones that control our

metabolism by helping us draw energy from the foods we eat. There are several ways the thyroid can malfunction, though—including failure to produce proper amounts of thyroid hormone.

Hypothyroidism: An Underactive Thyroid

Those whose thyroid glands produce too little thyroid hormone—like McCoy—suffer from hypothyroidism. This is the most frequent form of thyroid disease. Women are more likely to suffer from it than men; according to the AACE, by age 60 as many as 17 percent of women and 9 percent of men will have an underactive thyroid.

"Any lumps or bumps that don't feel right should be worked up," says Jonathan Lara, DO. "But as long as patients are proactive about their health, thyroid disease is often very treatable."



McCoy says one shouldn't dismiss the possibility of thyroid disease just because one is young, though. "I was barely in my 30s when I was diagnosed," she says. "Thyroid disease is more common than many people think."

Symptoms of hypothyroidism include fatigue, weight gain, cold sensitivity, forgetfulness, brittle hair and nails, dry skin, sore muscles, heavy or irregular periods, and increased sensitivity to medication. Hypothyroidism also ups the risk of miscarriages and pregnancy-induced high blood pressure, or pre-eclampsia.

The disease is usually diagnosed by a simple blood test that looks for—among other

things—elevated levels of thyroid stimulating hormone (TSH). The body produces TSH in an attempt to make the underperforming thyroid gland work harder. McCoy recommends that patients with hypothyroidism symptoms ask for a blood test themselves if their doctors don't. "People who are concerned about their thyroid have to be proactive," she says.

Once a patient is diagnosed with hypothyroidism, treatment is usually a matter of taking a daily dose of synthetic thyroid hormone—a lifelong

treatment, but a fairly straightforward and effective one. The AACE says regular monitoring of TSH levels is crucial to keep the amount of medication properly adjusted over time.

"One of the most amazing changes [as the result of medication] has been to the quality of my fatigue," McCoy says. "It used to be fatigue was always lurking behind my eyelids, a constant thing.

Now I still get tired, but most of the time it's a much shallower fatigue. Like a wading pool compared to the ocean."

"...one shouldn't dismiss the possibility of thyroid disease just because one is young...thyroid disease is more common than many people think."

Hyperthyroidism: An Overactive Thyroid

When the thyroid gland produces too much thyroid hormone, the resulting condition is known as hyperthyroidism. According to the AACE, hyperthyroidism is far less common than hypothyroidism, affecting less than one percent of all Americans.

Symptoms include weight loss, heat sensitivity, an elevated heart rate, anxiety, hair loss, muscle weakness, changes in menstrual patterns, and protruding eyes or a prominent stare. Patients often also have an enlarged thyroid gland. Hyperthyroidism can be life-threatening—the AACE says untreated hyperthyroidism once had a death rate as high as 50 percent. Again, a blood test is the primary diagnostic tool—the body tends to cut back on TSH production in an attempt to keep an overactive thyroid from working so hard.



Symptoms of Hypothyroidism

- fatigue
- weight gain
- cold sensitivity
- forgetfulness
- brittle hair and nails
- dry skin
- sore muscles
- heavy or irregular periods
- increased sensitivity to medication



Treatment for hyperthyroidism is more complicated than for hypothyroidism, and medication to slow the thyroid down is often only a temporary solution. Physicians often seek to destroy the thyroid gland entirely instead, using a dose or two of radioactive iodine, taken by mouth. The resulting "underactive" thyroid is then treated with the same synthetic thyroid hormones used for hypothyroidism.

In rare hyperthyroidism cases, the thyroid may need to be removed entirely—

but according to Lara, that's one of the less common reasons for thyroid surgery.

Thyroid Cancer and Thyroid Surgery

Lara, who performs thyroid surgery as part of his practice, says there are basically three main reasons a patient might need their thyroid removed: metabolic issues such as hyperthyroidism or (even more rarely) hypothyroidism; cases where an enlarged thyroid blocks the airway and causes trouble swallowing or breathing; and cases where

thyroid cancer is present. "Cancer is by far the biggest reason," Lara says.

The first sign of thyroid cancer is often when a doctor or patient notices a lump on the thyroid. Once blood tests have been done, diagnostic tests for thyroid cancer include an ultrasound to examine the thyroid and a fine needle aspiration to remove thyroid cells for diagnosis. Sixty to seventy-five percent of the time, Lara says, the cells in a thyroid lump will be clearly benign. Only three to five percent of the time will there be clear signs of cancer; in the remaining cases the results will often be suspicious but inconclusive, and thus require additional tests.



Symptoms of Hyperthyroidism

- weight loss
- heat sensitivity
- an elevated heart rate
- anxiety
- hair loss
- muscle weakness
- changes in menstrual patterns
- protruding eyes or a prominent stare
- often also an enlarged thyroid gland

Treatment usually requires removing the thyroid gland. "A thyroidectomy is major surgery, but it's not as complicated as people generally think," Lara explains. While there can be complications—such as blood or fluid collecting in the neck—that surgery is generally well tolerated, with recovery time averaging two weeks. Once the thyroid is gone, total thyroidectomy patients will also need to be on a lifelong regimen of synthetic thyroid medication.

The most common form of thyroid cancer, papillary thyroid carcinoma, also has the best prognosis, with a 95 percent survival rate after

surgery; the prognosis varies for the less common thyroid cancers. Lara recommends that anyone who feels any sort of lump on their thyroid—or anywhere else in their neck—see their primary care physician to have it evaluated.

"Any lumps or bumps that don't feel right should be worked up," Lara says. "But as long as patients are proactive about their health, thyroid disease is often very treatable." ♦

Health News Notes



Fruit Juice Interactions

A spoonful of sugar helps the medicine go down—but a glass of fruit juice can decrease the absorption of some drugs, making them less effective, according to a meeting of the American Chemical Society. Complicating matters: grapefruit juice, at least, increases the effects of other drugs, as well.

B Vitamins Don't Affect Cancer Risk



Vitamins B-6, B-12, and folate neither increase nor decrease the risk of developing cancer, according to the *Journal of the American Medical Association*.

Free Samples Hold Hidden Costs



Doctors who receive medication samples from drug companies are less likely to prescribe cheaper generic drugs to uninsured patients than doctors without a stash of freebies on hand, according to the *Southern Medical Journal*.

PRACTICING TUCSON OSTEOPATHIC PHYSICIANS BY SPECIALTY

Information obtained from:

*AOA Yearbook and Directory of Osteopathic Physicians
and the Arizona Board of Osteopathic Examiners in
Medicine and Surgery—Directory of Licensed
Osteopathic Physicians*

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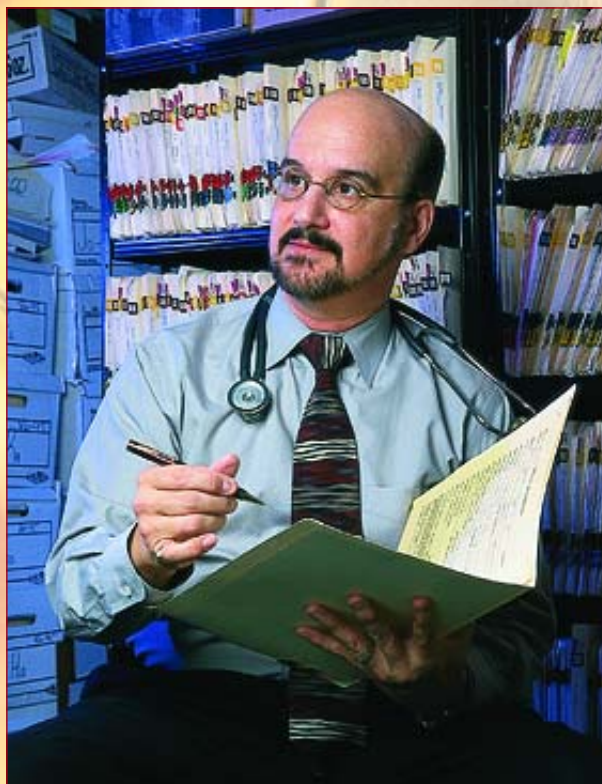
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