Antibiotics Kill Your Body's Good Bacteria, Too, Leading to Serious Health Risks

Posted By Dr. Mercola | June 18 2003
by Doug Kaufmann

"It is ironic that this humbled fungus, hailed as a benefactor of mankind, may by its very success prove to be a deciding factor in the decline of the present civilization."

-Dr. John I. Pitt, The Genus Penicillum, Academic Press, 1979

Simply put, antibiotics are poisons that are used to kill. Only licensed physicians can prescribe them. The drugs are used to kill bacteria. Certainly, many people have benefited from using them. However, if bacteria were the only organisms that antibiotics killed, much of this book would be unnecessary. In fact, I con-tend that poisons that kill small organisms in small doses -- organism-specific varieties notwithstanding -- can also kill big organisms, when they are taken in big doses. You, my friend, are a big organism.

We've talked about the link between fungus and human disease. This chapter addresses the possibility that antibiotics may help fungi to proliferate within the human body.

As an adult human, you have three to four pounds of beneficial bacteria and yeast living within your intestines. These microbes compete for nutrients from the food you eat. Usually, the strength in numbers beneficial bacteria enjoy both keeps the ever-present yeasts in check and causes them to produce nutrients such as the B vitamins.

However, every time you swallow antibiotics, you kill the beneficial bacteria within your intestines. When you do so, you upset the delicate balance of your intestinal terrain. Yeasts grow unchecked into large colonies and take over, in a condition called dysbiosis.

Yeasts are opportunistic organisms. This means that, as the intestinal bacteria die, yeasts thrive, especially when their dietary needs are met. They can use their tendrils, or hyphae, to literally poke holes through the lining of your intestinal wall. This results in a syndrome called leaky gut. Yeasts are not the only possible cause of this syndrome. Some scientists have linked non-steroidal, anti-inflammatory drugs (NSAIDS) such as naproxen and ibuprofen to the problem. Given their ability to alter intestinal terrain, antibiotics also likely contribute to leaky gut syndrome.

In addition to possibly causing leaky gut syndrome, I believe that parasitic yeasts can also cause you to change what you eat in that they encourage you to binge on carbohydrates including pasta, bread, sugar, potatoes, etc. So, it should come as no surprise that weight gain counts as one of the telltale signs of antibiotic damage and subsequent yeast overgrowth.

By altering the normal terrain of the intestines, antibiotics can also make food allergies more likely. An array of intestinal disorders can ensue, as well. Sadly, most doctors claim

ignorance concerning their patients' intestinal disorders rather than admit that the drugs they themselves prescribed actually caused the disorders to begin with.

Tons of antibiotics are fed to American livestock on a daily basis, purportedly to proof them against bacteria. This practice not only possibly contributes to antibiotic resistance in humans -- many experts feel weight gain, and not disease prevention, is the real reason antibiotics are so widely used. Fat cattle sell for more than thin cattle. That's all very well, but imagine what the antibiotics thereby possibly present in dairy products could be doing to our children's health.

Back in the 1950s, two researchers in Albany, New York, worked to develop an antimicrobial drug from a substance produced by a soil-based fungus. Although the nystatin they discovered is technically a mycotoxin, it works wonders an intestinal antifungal. This as yet revolutionary drug stops the yeast overgrowth caused by all other antibiotics and is 100 percent safe to use. In addition, nystatin works with no side effects, though it can cause a pseudo sickness that patients often confuse with side effects.

Also in the 1950s, scientists used mice to grade the relative toxicity of 340 antibiotics (Dr. William S. Spector, The Handbook of Toxicity, 1957). The researchers based their rankings on the amount of a given antibiotic required to kill half of the lab mice injected with it. I relate this story only to ask you, before 1957, how did scientists decide what would serve as prescriptive doses for these very same antibiotics when used in humans?

I'll assume that the same toxicity scale remains in place today. If it does, and if a given dose of penicillin will kill 50 percent of mice injected, it stands to reason that a much larger dose, or perhaps repetitive doses extended over 40 years, might prove fatal to a human. I don't know if larger doses are in fact administered to people. And, the 40-year scenario has its problems. But you have to admit, it's certainly food for thought.

The time span between when patients take rounds of antibiotics and when they die interests me. That's because I believe that few people really die of heart disease and diabetes. In actuality, antibiotics are responsible for deaths attributed to these diseases, because these drugs are what caused people to develop the diseases to begin with. And yet, incredibly, death certificates usually state the probable cause of death without mentioning whether the deceased had a history of taking antibiotics.

Remember, antibiotics are dangerous mycotoxins -- fungal metabolites. Just as importantly, medical experts have written articles maintaining that these drugs kill people. But, other experts insist on remaining sceptical as to the problem, even though these same experts readily recognize the link between weakened immune systems and death.

According to the 2001 Allergy and Asthma Report, the first immunodeficiency syndrome was identified in 1952. This document tells us that since that time, "more than 95 immune syndromes have been identified, with new conditions coming to light every day." The report goes on to say that research indicates that "increased antibiotic use in human infancy may be associated with increased risk of developing allergies."

Max Planck won the 1918 Nobel Prize in Physics. He once weighed in as to why science is slow to change even in the presence of overwhelming evidence that it should do so.

"A new scientific truth does not triumph by convincing its opponents and making them see the light," Planck said, "but rather because its opponents eventually die and a new generation grows up that is familiar with the ideas from the beginning."

That a new generation will grow up knowing of the dangers inherent in taking antibiotics is a good thing. That doctors will continue randomly prescribing fungal toxins should teach us the importance of knowing medical facts before blindly accepting any prescription. Please study the antimicrobial benefits and the immune system stimulants that nature provides. Know also that, in some instances, antibiotics may become necessary.

If you reach the point where no alternatives exist, I recommend that you ask your doctor to prescribe nystatin simultaneously with the antibiotic (see Dr. Holland's article). Also, keep in mind the post-antibiotic importance of restoring the intestinal terrain with plain yogurt and probiotics. If you experience bloating, belching, gas, constipation, diarrhea, GERD, or other intestinal problems, probiotics can play an important role in restoring your intestinal terrain.

Antibiotics -- to Take or Not to Take?

by David A. Holland, M.D.

I looked up antibiotics in Harrison's Textbook of Internal Medicine. The listing referred me to "antimicrobials." This caused me to realize how much more accurately the second term describes these substances, given the broad-spectrum nature of a lot of them.

I must confess that, as a doctor, I do prescribe "antimicrobials." Perhaps I prescribe more antifungals and nonprescription remedies than the usual doctor, but I do prescribe antibiotics, as well. Perhaps even more horrifying, considering Doug's articles condemning them, is that I've taken them myself! In fact, in these times it's a rare individual who goes through life without ingesting those little pills. So, three questions have become important -- when should you take antibiotics, when should you refrain, and what will you do when you've already taken them?

Alexander Fleming, by the grace of God, brought us a mixed blessing in 1928 with his accidental discovery of penicillin produced by, of all things, a fungus. Medicine's interest treating people for exposure to fungi dropped dramatically in succeeding years, until the microbes were only thought important insofar as their ability to produce increasingly diverse varieties of antibiotics.

Interest in fighting bacteria proliferated like a flesh-eating Strep infection, fueling the race to discover ever more antibiotics. Pharmaceutical salespeople invaded doctors' offices and hospitals, intent on convincing physicians their antibiotic was better than the others. These salespeople supported their pitches with studies, graphs, charts and convincing stats, while often failing to mention that their research had been funded by their own companies. The possible conflict of interest was, and remains, enormous.

I have no quarrel with such salespeople. They're regular men and women like you and me, just trying to make a living. However, when human lives are involved, funding research to prove that your own product is better than the competition's is just plain wrong. The advantage is obvious, and the danger that a great deal of objectivity could be lost is only all too real.

I believe that an impartial, third party should be assigned to perform such research, funded by a mandatory "ante" from all pharmaceutical compan-ies involved in producing a given category of drug. Of course, that will be the day! In case the above scenario never happens, we would do well to take with several grains of salt the unregulated information that companies provide about their own products.

Perhaps you are wondering about the use -- and abuse -- of antibiotics in general. Let me give you an example. One of the most common diagnoses given at a doctor's office is the upper respiratory infection (URI). It accounts for up to 70 percent of all antibiotics dispensed (Annals of Internal Medicine. American College of Physicians. American Society of Internal Medicine. March 20, 2001).

However, according to Dr. Carol Kauffman, most URIs are not caused by the bacteria that antibiotics are designed to fight. Rather, Kauffman says, they are caused by fungi. So, unless a secondary, bacterial infection presents itself -- and even then, the rules change -- most URIs do not require the use of antibiotics.

Regarding ear infections, in one study, children administered antibiotics for acute otitis media suffered double the rate of adverse effects compared to children in the study who took placebos (Clinical Evidence. 2000). The difference in outcome for those children in the study who took antibiotics compared to those who do not was almost negligible. Some scientists counter that children who take antibiotics run lower risks of secondary ear infections such as meningitis or mastoiditis (infection of the angular bone located behind your ear).

Of course, the landscape is complicated by noncompliance. The portion of people who take their antibiotics as prescribed has been estimated at anywhere between 8 to 68 percent. So it's difficult to say just how effective antibiotics actually are.

Now, say my daughter were to get sick for 10 days, miserable with a high fever and screaming ear pain. Say our doctor said her ear canal checked out as angry red. Am I going to have my daughter take the prescription? Probably so. We cared for a young woman at the hospital where I worked who was literally at her death bed with overwhelming Streptococcal -- bacterial -- pneumonia. One of her lungs was saturated with the infection, which had also spread throughout her bloodstream.

I went on to my next rotation thinking that was the last I would hear of that patient. However, I later spoke with her attending physician. He told me she walked out of that hospital, completely cured. So, antibiotics save lives, but it's not exactly a common occurrence. Certainly, most of you out there suffering from the common cold are not near death, so you should think twice about taking antibiotics.

The non-synthetic antibiotics are fungal by-products called mycotoxins. Penicillin is perhaps the best example. In other words, mycotoxins kill off fungi's competitors, allowing fungi to grab up all of the nutrients for themselves. Alexander Fleming himself observed this in action, and it later led him to develop penicillin. When a mold -- molds are fungi -- contaminated a bacteria colony upon which Fleming was performing an experiment, the invader cleared the area around it of all bacteria. When Fleming investigated, It turned out that the fungus had produced a substance he would later call penicillin, killing the bacteria in residence.

Just because they kill bacteria, you may be thinking, doesn't mean that some, many or especially all of the mycotoxins used as antibiotics are necessarily harmful to human beings. A. V. Costantini in effect counters this idea when he speaks of the work of two scientists by the name of Bernstein and Ross. Costantini says that the men found that two or more months of treatment with penicillin and other antibiotics contributed to what they saw as a "significantly increased risk of non-Hodgkin's lymphoma in humans (Costantini, A. V. Fungalbionics. 1998)."

How many people, children included, have undergone dose after dose of antibiotics for recurring infections? Doug and I believe that these relatively small doses taken over long periods of time are actually harming us in similar, incremental fashion, later showing up as cancer, diabetes, vasculitis or other diseases.

We take antibiotics when we are sick, when our immune systems weaken. The mycotoxins pharmacies dispense for use as antibiotics only exacerbate the problem, because the lion's share of these substances have been shown to be immunosuppressants (CAST Report No. 116. November 1989.). Not only are they capable of hamstringing our immune systems, they also destroy the friendly bacteria that guard our intestines.

These friendly bacteria include Lactobacillus acidophilus, Bifidus and Bulgaricus, supplements for which can be found in any health food store's refrigerated section. They protect us against pathogens such as Salmonella, yeast, cholera, and the bad E. coli. They are so potent that, prior a trip abroad, to protect yourself from traveler's diarrhea you'd do better to skip the usual antibiotics and instead take acidophilus supplements.

Unfortunately, these good flora are so vulnerable to antibiotics that, in mice, a "single injection of streptomycin can eradicate the protective effect of the normal flora. (Mandell. Principles and Practice of Infectious Diseases. 2000.)" And, once gone, these friendly bacteria are replaced by hostile bacteria such as Pseudomonas, Clostridium, and Klebsiella, and by Candida yeast, a powerful member of the fungi family.

So, we have the good and the bad regarding our chemical friends known as antibiotics. They can "save the day" at times, but they have ruined them at others -- just ask any woman with a yeast infection or look at any baby who suffers from thrush. You should know that, even should you just say "no" when your doctor moves to prescribe antibiotics for you, theoretically speaking you may still be taking them with every bite of steak and pork you eat.

That’s because more antibiotics per pound are used on livestock than in human medicine. How much of those antibiotics are passed on is difficult to determine, but the mere possibility of this kind of thing is certainly a worry.

Our goal in this book is to educate you and to help you make informed decisions. Some final, simple tips follow:

An ounce of prevention.... Exercise, eat intelligently and take a few supplements. Avoid alcohol, smoking, and recreational drugs. Get some rest once in a while. Pray.

Despite our best efforts, most of us will get sick at some point and decide to go see a doctor. If you are a stubborn, married man, your wife will likely make the appointment for you.

Ask Questions. If your doctor diagnoses you with an upper respiratory infection, sore throat (in which the strep test is negative), bronchitis, sinusitis, or ear infection, and you wonder if you really need an antibiotic, make a point of asking her about it. A lot of physicians would be pleasantly surprised that one of their patients would even consider trying to recuperate without antibiotics. Ask if you can treat your condition symptomatically and come back or call in a couple of days if you are not better.

If your questions annoy your doctor, then get another doctor. After all, you pay the bills, either directly or out of your paycheck in the form of insurance, and you deserve adequate treatment. On the other hand, if you feel you, in fact, do need an antibiotic and your doctor disagrees, try to work a deal in which she will prescribe an antibiotic for you if you don’t feel better in a couple of days. I learned an important lesson about this kind of disagreement during college, on a visit to the infirmary. The doctor there refused to give me an antibiotic for a URI I’d come down with. I had to suppress my anger at what I saw as arrogance on his part, but lo and behold, he was right. I got better without the pills I’d been sure I’d needed. I think a lot of people tend to underestimate their bodies’ healing abilities, in much the same way as I did. That’s just one reason why doctors are oftentimes in a better position to make the call as to whether or not to prescribe.

Take an objective look at yourself and your life-style. If you keep coming down with the same thing, do some research and a little thinking. Do you drink a lot of soda? Do you smoke? Are you taking antibiotic after antibiotic and now have a secondary yeast or fungal infection? How is your spiritual life? Your stress level? The point is, myriad factors contribute to "wellness."

As far as chronic sinus infections go, Johns Hopkins researchers are now saying most such conditions are caused by a fungus. So, if you do have chronic sinusitis, stop taking antibiotics, get on an antifungal diet, and ask your doctor for antifungal medications. If your doctor refuses, visit a health food store for natural, off-the-shelf antifungals such as olive leaf extract, garlic, and Caprylic acid.

Once you improve, make sure you go back and let your doctor know how things worked out. Chances are she is neither experienced nor comfortable with prescribing antifungal

medication. Your story may convince her to do her own research, the first step to changing her treatment philosophy.

It shouldn't be too difficult to convince your doctor to let you try a prescription of nystatin. As one of the better gut antifungals, nystatin is also remarkably safe and free of side-effects.

If you've decided to go ahead and take an antibiotic:

Get the facts. Ask your doctor how many days you must take the antibiotic and if you, in fact, do need the latest, most powerful one on the market. Simple urinary tract infections are now treated with only three days of antibiotics. Sinus infections, bronchitis, and ear infections in children over two years of age can be treated with as few as five days of antibiotics, new or old, generic or name brand. This may not be possible, however, if you have other medical conditions or if you smoke.

Build trust. Commit to the full course of the antibiotic unless you experience significant side effects or an allergic reaction. You sought medical advice and agreed to the prescription. You will build trust with your doctor if you work as a team. This trust will be very important once you see number 3 below.

Take an antifungal with the antibiotic. For example, you could ask your doctor for a prescription of nystatin to take during the course of your antibiotic. Many dermatologists do this when prescribing long-term antibiotic courses for acne. I suggest adults take two tablets twice a day -- 1 cc of suspension twice a day for children -- to prevent yeast overgrowth in your intestines. Most cases of upset stomach or diarrhea that kick in a few days of beginning a round of antibiotics can be cured with a single dose of the drug. Diarrhea after a two-week round of antibiotics is likely caused by a different bug altogether -- be sure to bring that to your doctor's attention.

I should tell you that, in my clinical practice years, many of my patients made great strides against acne through taking nystatin and a change in diet alone, without the antibiotics.

Supplement your intake. Take an antioxidant supplement, one which includes vitamin E, zinc, selenium, vitamin C, and vitamin A, among others. According to A.V. Costantini, all antioxidants are antifungal. (Costantini. 1998.)

Keep your bowels moving. If antibiotics kill off your friendly, intestinal bacteria, once you cease taking antibiotics you'll run a higher risk of infection by other, more hostile bacteria. These bacteria will be quick to find and exploit pockets of debris that could be collecting and putrefying in your intestines if you happen to become constipated. So, be sure to keep your digestive tract as clear as possible until you can repopulate it with friendly bacteria. Psyllium hulls fiber from your local health food store is the best, bulk fiber to use, as long as you don't have a history of intestinal obstruction. Psyllium not only relieves constipation. It also slows diarrhea by absorbing excess water.

Replace the good bacteria in your intestines. Supplement with an acidophilus supplement for a few weeks following any course of antibiotics. Do not take these simultaneously with your antibiotic, or you will simply end up with a lot of very dead, albeit still friendly bacteria in your intestines. At the very most, take acidophilus supplements either in between antibiotic doses or after you have completely finished your prescription.

Look back at why you became ill to begin with. I once suffered from strep throat after indulging in half a box of chocolates. That should have come as no surprise. Who wouldn't be crippled by that amount of garbage? More than likely, you have your own experience regarding similar binges. My point is, diet plays at least as much a role as actual exposure to germs as to whether we get sick -- when we are healthy and eating correctly, our bodies are amazingly resistant to infection.

One, last note: Please ignore advertisements that recommend guzzling orange juice for the vitamin C it contains. A big dose of sugar is what you'd actually be getting. I have heard more than a few patients note that once they felt they were coming down with something, they immediately began downing glass after glass of orange juice, only to get even sicker. They concluded that they must not have caught the illness in time, which couldn't have been any further from the truth.

The truth is, they simply fueled the fire of their infections with lots of sugar, all because they trusted a corporation's advertisement to educate them about proper healing strategies. If you want that much vitamin C, you will be perfectly fine taking it in the 1,000 mg pill form a few times a day. As far as fluid requirements are concerned, your body is 70 percent water -- and that is exactly what it needs!

Tonsillectomy may increase breast cancer risk

Published: April 26, 2007

By LOIS BAKER
Contributing Editor

Women who had their tonsils removed in childhood may be at increased risk of developing premenopausal breast cancer, a study conducted by UB epidemiologists has found.

Results showed that premenopausal women in the study who had a tonsillectomy as children were 50 percent more likely to develop breast cancer than women who had not had a tonsillectomy. No increased risk was observed in postmenopausal women who had undergone the procedure.

The findings were reported Sunday at the American Association of Cancer Research annual meeting in Los Angeles. Theodore Brasky, a doctoral student in the Department of Social and Preventive Medicine, School of Public Health and Health Professions, was lead researcher.

"Previous epidemiologic studies have found that tonsillectomy is associated with an increased risk of Hodgkin's lymphoma, leukemia and cancers of the breast and prostate," said Brasky. "Our study adds to the evidence that tonsillectomy is associated with cancer risk. However, the evidence is still preliminary, and it isn't possible to say that there is a causal link.

"The apparent association may be related to the loss of the protective function of the tonsils when they are removed," said Brasky. "An alternate theory is that tonsils that need to be removed may be markers for severe or chronic infections in childhood. These infections cause inflammation, and chronic inflammation may contribute to carcinogenesis."

The research is based on data from the Western New York Diet Study, a case-control study conducted between 1986-91 that collected extensive information from women on diet and disease. The 740 breast cancer cases came from hospitals throughout Erie and Niagara counties. The 810 controls were selected randomly from motor vehicle records for women under 65 and from Medicare rolls for women 65 and older.

"The differences in associations for pre- and postmenopausal breast cancer may indicate that breast cancer in these two age groups may be caused by different factors," said Brasky. "It's also possible that the reason tonsils are removed has changed over time, and that may explain the differences seen between pre- and postmenopausal women in this study."

The finding among premenopausal women contributes to the accumulating evidence that childhood exposures influence the risk of breast cancer in adulthood, Brasky noted.

However, because the findings are among only a few studies that have investigated the association of tonsillectomy and breast cancer, they should be interpreted with caution until they are replicated, he said.

Also contributing to the study were Matthew Bonner, Saxon Graham, John Vena, James Marshall, John Brasure and Jo Freudenheim, all current or former members of the Department of Social and Preventive Medicine.

The work was supported by grants from the National Cancer Institute and the American Cancer Society.

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Tonsillitis, tonsillectomy and Hodgkin's lymphoma

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It has been debated whether the reported increased risk of Hodgkin's lymphoma (HL) after tonsillectomy could be due to some underlying factor rather than the surgery itself. We studied whether not only tonsillectomy but also tonsillitis was associated with HL. This nationwide cohort study included all Danish residents during 1977–2001. Information on a diagnosis of tonsillitis, tonsillectomy, or HL was obtained from national registries. During 124 million person-years we observed 2,988 HL patients of whom 58 were tonsillectomized (most with preceding tonsillitis) and 14 were diagnosed with only tonsillitis at more than 1 year before HL diagnosis. Tonsillectomy was associated with a significantly increased HL risk in persons under 15 years of age as follows: 1–4 years after tonsillectomy, relative risk (RR) = 3.9 [95% CI: 1.4–11; $n = 4$]; >5 years after tonsillectomy, RR = 3.5 [1.4–8.5; $n = 5$]. No young cases of HL occurred among persons diagnosed with only tonsillitis. In contrast, 1–4 years after a hospital diagnosis of tonsillitis without subsequent tonsillectomy we found an increased HL risk in persons aged 15 years or above as follows: 15–34 years of age at HL diagnosis, RR = 3.5 [1.6–7.7; $n = 6$]; 35+ years, RR = 5.9 [2.2–16; $n = 4$]. Age at tonsillitis or tonsillectomy did not modify HL risk within the 3 age strata. An increased HL risk was found both after tonsillectomy and after an isolated diagnosis of tonsillitis. These results suggest that tonsillitis is a risk factor for HL and not that, as previously reported, only the surgical removal of tonsils is a risk factor.

A prevailing hypothesis for an association between tonsillectomy and Hodgkin's lymphoma (HL) has been that removal of the "lymphoid tissue barrier" would predispose to the development of HL.[1] However, so far, epidemiological studies have been conflicting,[1,2] as case–control studies have reported either an increased risk of HL following tonsillectomy[1,3–6] or no association.[2,7–18] One nation-wide cohort study found a marginally increased risk for all age groups, but a 4-fold increased HL risk was found for persons tonsillectomized before the age of 12 years.[19] The latter finding is of particular interest because the tonsils' immunological functions are believed to decline from childhood to adulthood.[20] However, few studies on tonsillectomy and HL have included age at tonsillectomy,[6,7,18,19,21] leading to conflicting results.

In many cases, tonsillectomy can be regarded as an indicator of severe tonsillitis. Accordingly, in a population-based study we found that 81% of patients aged less than 20 years who had been tonsillectomized at a hospital had also been admitted for chronic tonsil disease within the previous year.[22] However, investigations studying the potential association between tonsillitis and HL are sparse.[2,8,13] As tonsillitis most often precedes tonsillectomy, it is of particular interest to study their potential effect on HL risk concomitantly as it might be that tonsillitis rather than removal of the tonsils is associated with HL.

In a national-wide cohort study we analyzed whether tonsillectomy or hospital-diagnosed tonsillitis was associated with an increased risk of HL. In addition, we also studied whether age at first registration of tonsillectomy or tonsillitis influenced HL risk.

Key words: epidemiology, Hodgkin's lymphoma, risk factor, tonsillitis, tonsillectomy

DOI: 10.1002/ijc.24973

History: Received 14 Aug 2009; Accepted 1 Oct 2009; Online 16 Oct 2009

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Material and Methods

Study population

We identified all Danish residents alive anytime between 1977 and 2001 in the Danish Civil Registration System (CRS) as the study population. The CRS was established on April 1, 1968, and since that date all persons living in Denmark have been assigned a personal identification number. The CRS number allows identity secure linkage between registers, as data in Danish registers were recorded by this number. Information in the CRS is regularly updated; data concerning personal identification number, date of birth, sex, emigration and vital status were extracted from the CRS.

Patients with tonsillectomy were identified in the Danish National Patient Registry (NPR) and the Danish Health Security System, whereas patients with tonsillitis were only ascertained from the NPR. The NPR includes registrations of the patients' personal identification number, dates of hospital admission and discharge, discharge diagnoses and surgical operation codes registered according to the International Classification of Diseases (ICD-8 and ICD-10). Reporting of discharge diagnosis to the NPR has been mandatory since the start of the NPR on January 1, 1977. Since January 1, 1995, outpatients tonsillectomized in hospital-based settings

Table 1. Age-specific relative risk[1] of Hodgkin's lymphoma by history of tonsillitis and tonsillectomy during 1977–2001, Denmark

History of tonsillitis and tonsillectomy	<15 years		15–34 years		≥35 years	
	N/Pyrs (×10^3)	RR (95% CI)[2]	N/Pyrs (×10^3)	RR (95% CI)	N/Pyrs (×10^3)	RR (95% CI)
No tonsillectomy/no tonsillitis	97/22,640	1 reference	1,082/34,270	1 reference	1,720/64,300	1 reference
<1 year since first tonsillitis or/and tonsillectomy						
Tonsillectomy	0/73	– (0–14.5)	4/76	2.0 (0.7–5.2)	10/12	35.7 (19.2–66.6)
Tonsillitis without tonsillectomy	0/40	– (0–37.2)	1/20	1.8 (0.3–12.5)	2/8	10.1 (2.5–40.5)
1–4 years since first tonsillitis or/and tonsillectomy						
Tonsillectomy	4/236	3.9 (1.4–10.6)	12/310	1.4 (0.8–2.5)	2/53	1.6 (0.4–6.4)
Tonsillitis without tonsillectomy	0/117	– (0–10.6)	6/59	3.5 (1.6–7.7)	4/27	5.9 (2.2–15.6)
5 years or more since first tonsillitis or/and tonsillectomy						
Tonsillectomy	5/182	3.5 (1.4–8.5)	29/866	1.2 (0.8–1.7)	6/281	1.0 (0.4–2.2)
Tonsillitis without tonsillectomy	0/112	– (0–5.0)	4/180	0.8 (0.3–2.0)	0/72	– (0–2.2)

[1]RRs are adjusted for age, calendar period and sex.
[2]Exact upper limits were calculated if no cases were observed.
Abbreviations: RR, relative risk; N, number of persons; Pyrs, person-years; CI, confidence interval.

have also been registered. The following ICD codes were used to identify acute tonsillitis: before 1994, ICD-8: 03400, 463; and from 1994 and later, ICD-10: DJ03. For chronic disease of the tonsils, the ICD-8 codes: 500.00, 500.02, 500.08, 500.09 and ICD-10: DJ35.0, DJ35.1, DJ35.3, DJ35.8, DJ35.9 were selected. For tonsillectomy the operation codes were 2614, KEMB10 and KEMB20. We furthermore extracted data from the Danish Health Security System on tonsillectomies performed in otolaryngology offices during 1991–2001. For the readability in this article, acute tonsillitis and chronic disease of the tonsils are both referred to as tonsillitis if not otherwise specified. HL patients were identified in the Danish Cancer Registry, which is considered virtually complete since its establishment in 1943.[23] HL cases were identified by ICD-7 code 201.

Statistical analysis

The association between tonsillitis, tonsillectomy and HL was analyzed by time since first registration of tonsillectomy or tonsillitis and by age at first tonsillitis or tonsillectomy registration. This was evaluated by incidence rate ratios estimated by Poisson regression models. Incidence rate ratios were used as a measure of relative risks (RRs). Follow-up began on January 1, 1977, or date of birth whichever came last and ended on date of HL, death, emigration or December 31, 2001, whichever came first. The variables tonsillitis and tonsillectomy were treated as time-dependent variables, *i.e.* persons registered with tonsillitis or tonsillectomy were followed as exposed from time of tonsillitis or tonsillectomy. If a person first had a registration of tonsillitis and later was tonsillectomized, the person was considered as unexposed from start of follow-up until time of tonsillitis, as exposed to tonsillitis (*i.e.* tonsillitis without tonsillectomy) until time of tonsillectomy and then as exposed to tonsillectomy onwards. The analyses were stratified according to attained age (<15, 15–34 and ≥35 years) according to the hypothesized different age-dependent disease entities constituting HL's bimodal age curve.[24,25] Adjustment was made for sex, age (5-year categories) and calendar period (5-year intervals); all tests were likelihood ratio tests. Exact upper limits for RR where no cases were observed were estimated from the Poisson distribution using expected number of cases calculated from age-, period- and sex-specific rates.

Results

Overall, the cohort members were followed for 124 million person-years. Tonsillitis and tonsillectomy patients were followed for 0.64 million and 2.1 million person-years, respectively. A total of 2,988 HL cases were observed. HL occurred in 89 persons with a history of tonsillitis ($n = 17$) or tonsillectomy ($n = 72$). Among those with a history of tonsillectomy, 72% had a prior hospital diagnosis of tonsillitis. The mean follow-up time from tonsillitis and tonsillectomy to HL diagnosis was 4.1 and 7.0 years, respectively. A total of 72 patients were diagnosed with HL at more than 1 year after their first registration of tonsillitis ($n = 14$) or tonsillectomy ($n = 58$). Their year of birth was distributed as follows: 17 were born before 1950, 5 during 1950–59, 27 during 1960–69, 31 during 1970–79 and 9 in 1980 or later, and their age at HL ranged from 8 to 71 years.

Table 1 presents the age-specific RRs of HL according to history of tonsillectomy and tonsillitis at <1, 1–4 and ≥5 years after the first tonsillectomy or tonsillitis registration adjusted for age, calendar period and sex. The risk of HL was significantly increased among persons in the attained age group of younger than 15 years for both 1–4 years (RR = 3.9 [95% CI: 1.4–11]) and 5 years or more (RR = 3.5 [1.4–8.5]) after the tonsillectomy, compared to persons in the same age group with history of neither tonsillectomy nor tonsillitis. In contrast, there was no statistically significant association between tonsillectomy and HL risk among persons aged 15–34 or ≥35 years. All HL patients who were younger than 15

Table 2. Age-specific relative risk[1] of Hodgkin's lymphoma by age at first tonsillitis or tonsillectomy registration during 1977–2001, Denmark[2]

History of tonsillitis and tonsillectomy	<15 years		15–34 years		≥35 years	
	N/Pyrs (×10^3)	RR (95% CI)[3]	N/Pyrs (×10^3)	RR (95% CI)	N/Pyrs (×10^3)	RR (95% CI)
No tonsillectomy/no tonsillitis	97/22,640	1 reference	1,082/34,270	1 reference	1,720/64,300	1 reference
Age at first tonsillitis or tonsillectomy 0–9 years						
Tonsillectomy	8/393	3.5 (1.7–7.3)	10/293	1.2 (0.6–2.3)	–	–
Tonsillitis without tonsillectomy	0/224	– (0–3.5)	2/96	0.8 (0.2–3.0)	–	–
Age at first tonsillitis or tonsillectomy ≥10 years						
Tonsillectomy	1/25	4.8 (0.7–34.7)	31/883	1.2 (0.9–1.8)	8/333	1.1 (0.6–2.2)
Tonsillitis without tonsillectomy	0/6	– (0–69.5)	8/143	1.8 (0.9–3.7)	4/100	1.7 (0.6–4.5)

[1]RRs are adjusted for age, calendar period and sex.
[2]First year of follow-up after tonsillectomy or tonsillitis is excluded from the analyses.
[3]Exact upper limits were calculated if no cases were observed.
Abbreviations: RR, relative risk; N, number of persons; Pyrs, person-years; CI, confidence interval.

years with diagnoses of tonsillitis had also been tonsillectomized. In contrast, HL risks were significantly increased 1–4 years after tonsillitis, with RR estimates of 3.5 [1.6–7.7] and 5.9 [2.2–16] among persons aged 15–34 and ≥35 years, respectively. No such association with HL risk was found among the age group of 5 years or more after tonsillitis.

Less than 1 year after tonsillectomy or tonsillitis, HL risk was markedly increased among persons aged 35 years or older, with RRs of 36 [19–67] and 10 [2.5–41], respectively, compared to persons with no history of either tonsillectomy or tonsillitis (Table 1). This suggested the possibility of inverse causality, and consequently the first year of follow-up after tonsillectomy and tonsillitis was excluded in the following analyses of age at first tonsillectomy and first tonsillitis registration and HL risk was adjusted for age, calendar period and sex.

Overall, persons with tonsillitis or tonsillectomy registered before the age 10 years or at 10 years or later had relative HL risks of 1.40 [0.90–2.19] and 1.32 [1.00–1.74], respectively, compared to persons with no history of either tonsillitis or tonsillectomy (data not shown). The ratio between the RRs of the 2 groups is 1.40/1.32 = 1.07 [0.63–1.79], which changed to 1.40 [0.80–2.47] after further adjustment for type of disease (tonsillitis, tonsillectomy) and times since first tonsillectomy or tonsillitis registration (1–4, 5–9 and 10+ years). Table 2 presents the age-specific RRs of HL by age at first tonsillitis or tonsillectomy registration before the age 10 years or at 10 years or older, compared to persons with no history of either tonsillitis or tonsillectomy. In the attained age group of less than 15 years the RR of HL was 3.5 [1.7–7.3, $n = 8$] and 4.8 [0.7–35, $n = 1$], respectively, when tonsillectomy was registered before the age of 10 years or at 10 years or later. Among persons aged 15–34 years the corresponding RRs of HL when tonsillectomy was registered before or after the age of 10 were 1.2 [0.6–2.3, $n = 10$] and 1.2 [0.9–1.8, $n = 31$], respectively. Because of study design, persons aged 35 years or older could not have been registered with tonsillitis or tonsillectomy before the age of 10 years, and the RR of HL was 1.1 [0.6–2.2, $n = 8$] for persons tonsillectomized at the age of 10 years or later. Only 2 cases had a diagnosis of tonsillitis before the age of 10 years. They both occurred in the attained age group of 15–34 years and the corresponding RR of HL was 0.8 [0.2–3.0]. Tonsillitis at age 10 years or more was found to be associated with an increased risk of HL (for the attained age group of 15–34 years, RR was 1.8 [0.9–3.7, $n = 8$]; for 35 years or more, it was 1.7 [0.6–4.5, $n = 4$]), compared to persons with no history of either tonsillitis or tonsillectomy.

Additional analyses including only patients with HL diagnosed at 2 years or more after tonsillectomy or tonsillitis did not alter risk estimates of HL materially (data not shown). A further analysis including only tonsillectomies ($n = 58$) and not tonsillitis did not alter the result of no association between age at tonsillectomy and HL risk (data not shown).

Discussion

We found a significantly increased risk of HL among persons in the attained age group of younger than 15 years with a history of tonsillectomy, whereas persons aged 15–34 and ≥35 years had a significantly increased HL risk of 1–4 years after tonsillitis. Age at tonsillitis or tonsillectomy within these 3 age strata did not modify the HL risk as previously suggested.

It has been questioned[18,19] whether the increased risk of HL after tonsillectomy reported in several studies[1,4,5] could be due to some underlying factor leading to tonsillectomy rather than the surgery itself. Our findings support that this could be the case; tonsillitis preceded most tonsillectomies. As tonsillectomy did not further increase the HL risk after tonsillitis among persons aged 15 years or older, it would seem reasonable to interpret that tonsillitis and not removal of the tonsils was associated with the increased risk of HL, at least in that age group. It should, however, be noted that all cases aged less than 15 years with diagnoses of tonsillitis had also been tonsillectomized. This could be due to small numbers and, however, also be that tonsillitis associated with HL

in children is more severe thus leading them to be tonsillectomized more often than other children, whereas in adulthood this is not the case. However, there remains speculation as there are no available data that could be used to address this issue. Still, it cannot be excluded that our findings represent different etiologies being involved in HL in persons aged below and above 15 years.

Similar to our results, most of the studies on tonsillectomy and attained age have found an increased HL risk among younger persons. Among these, a Swedish population-based cohort study (including 20 HL patients) using registry information found HL risk among persons who were younger than 20 years to be 3-fold [95% CI: 1.2–6.2] increased after tonsillectomy, while RRs were less and not statistically significantly increased at older ages.[19] An Italian study found a higher frequency of tonsillectomy among HL patients who were younger than 40 years compared to HL patients who were 40 years or older.[12] Likewise, 2 American studies conducted by the same author in the same area and calendar period reported an increased HL risk in children aged 12 years or younger compared to their siblings[6] and in persons aged 40 years or less,[1] respectively. In contrast, 1 of 2 other American studies reported a lower tonsillectomy frequency in HL patients who were younger than 15 years compared to the older age groups[7] and the other study found only a significantly higher HL risk (RR = 3.0 [95% CI: 1.3–6.9]) in persons aged 55 years or older compared to their age-matched siblings.[26] The latter finding could, however, be due to lack of adjustment for calendar period as also suggested by the authors.

The results from studies on age at tonsillectomy and HL risk have varied.[6,18,19,21] The previously mentioned Swedish study found a 4-fold increased risk of HL if tonsillectomy was performed before the age of 12 years ($n = 7$), but they found no increased risk if tonsillectomy was performed at age of 12 years or later ($n = 13$).[19] However, this difference by age at tonsillectomy could to some degree be due to lack of stratification by attained age as performed in our analyses. The authors report that the cases with tonsillectomy performed at age of 12 years or later had been diagnosed with HL at an older age than average. Furthermore, they reported that the increased risk of HL after tonsillectomy is limited to persons aged less than 20 years. Thus, the lower risk in persons with tonsillectomy performed at age of 12 years or later might be because they during follow-up on average are older and therefore have a lower risk.[19] A recent German case–control study comprising 115 HL patients and 710 controls with self-reported data on tonsillectomy reported a statistically insignificantly increased HL risk, when tonsillectomy was performed before the age of 7 years.[18] We did not find that age at tonsillitis or tonsillectomy modified the HL risk within age strata, which is similar to findings in 2 American case–control studies including only tonsillectomy, where age-matched siblings were used as controls.[6,7] In contrast to all these results, a case–control study including 160 HL patients reported a protective effect (RR = 0.63 [95% CI: 0.46–0.86]) of tonsillectomy when performed before the age of 10 years relying on self-reported data on age of tonsillectomy.[21]

The literature on a possible association between tonsillitis and HL is sparse. A case–control study including 60 male HL patients[13] as well as 2 other case–control studies of 53 HL patients[2] and 45 HL patients using classmates as controls[8] did not find any association with HL. None of the studies, however, studied tonsillitis in relation to age at HL diagnosis. Furthermore, information on history of tonsillitis was self-reported in 2 of the studies.[2,13] To the best of our knowledge, no prior studies have analyzed age at tonsillitis and HL risk.

The immunological role of the tonsils is believed to decrease from childhood to adulthood. It has therefore been suggested that an altered or impaired immune response of the tonsils could constitute an etiological link between tonsillitis and HL. Epstein-Barr virus has been speculated to be a part of this explanation, as it has been associated with both HL[27] and tonsillitis.[28–30] However, so far no generally accepted etiological explanation exists on how tonsillitis may contribute to the development of HL.

The registration of tonsillectomy and tonsillitis in the NPR started in 1977, making it more likely for patients aged less than 15 years to be followed from birth when compared to the older age groups, who had their childhood before 1977. Because most tonsillectomies and tonsillitis occur during childhood it was thus less probable for the older age groups to have their complete tonsil history registered during the study period. The risk of misclassification of history of tonsillectomy and tonsillitis was therefore higher in the older age groups with long time since tonsillectomy or tonsillitis. Misclassification (outcome independent) may thus be a possibility in this age group, which may lead the risk estimates toward no association. We have not validated the reliability and completeness of the NPR and Health Security Systems with respect to tonsillitis and tonsillectomy. However, studies have described the validity of medical diagnoses to be high for uncomplicated diagnoses, and a particularly high agreement for surgical procedures.[31,32] We found no studies on the reliability or completeness of the Health Security System's Registry. This registry was established as an administrative registry in order to reimburse medical specialists from the National Health Insurance, which most likely makes it complete. In conclusion, misclassification is not considered a serious problem because tonsillitis diagnoses do not require complicated procedures and the surgical procedure tonsillectomy is likely registered with a high validity and completeness.

High socioeconomic status and educational level have been suggested to confound the association between tonsillectomy and HL.[15,21,26] This was, however, not confirmed in a Swedish study.[13] Furthermore, tonsillectomy and hospital-diagnosed tonsillitis in Denmark is based on the entire population with free access to healthcare and mandatory registration, making an association between socioeconomic status and registration of tonsillitis or tonsillectomy unlikely. Nevertheless, an

element of social confounding of the association between tonsillectomy, tonsillitis and HL cannot be ruled out.

Our study had several strengths. It was based on the entire population of Denmark and used exposure information obtained from registries reported independently of and prior to HL development. Thus our data must be considered free from selection bias and outcome-dependent misclassification.

In conclusion, tonsillectomy was associated with a significantly increased risk of HL among persons who were younger than 15 years, whereas persons aged 15 years or older had a significantly increased HL risk at 1–4 years after tonsillitis. As tonsillitis most often precedes tonsillectomy it cannot be ruled out that severe tonsillitis rather than removal of the tonsils could be associated with increased HL risk.

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Removing Tonsils May Not Be Best for Kids

Posted By Dr. Mercola | November 22 2007 |

Removing the tonsils of children who have only mild or moderate throat infections is likely more expensive, and has fewer health benefits, than simply waiting for the infection to clear.

In a study of 300 children who were advised to have their tonsils out, those who avoided surgery made fewer annual visits to doctors, and had lower resulting medical costs due to fevers and throat infections. In fact, annual costs for the children who had their tonsils out were, on average, almost 50 percent higher.

Tonsillectomies are among the most frequently performed surgical procedures for children.

Sources:

- Yahoo News November 20, 2007

Kids at Day Care Get More Infections Now, but Fewer Later

Dec 6, 2010 | 3:01 PM ET | Maureen Salamon, MyHealthNewsDaily Contributor

Young children who attend large day care facilities suffer more respiratory and ear infections as toddlers than kids who spend their days at home, but develop fewer such illnesses during their grade-school years, a new study suggests.

"Overall, all the children got sick the same amount, so there are no differences between the groups — just the timing is different," said study researcher Sylvana M. Cote, a psychologist at the University of Montreal in Quebec.

However, "one can argue that there is an advantage of not missing school days, when they're missing major education that's really the basis of their academic trajectory, Cote told MyHealthNewsDaily.

Cote studied data over eight years, tracking how often children suffered respiratory, ear or gastrointestinal infections during their early preschool (up to age 2½), late preschool (3½ to 4½) and early elementary school (ages 5 to 8) years.

Among the 1,238 families in the study, kids who began attending day care facilities in large settings before age 2½ had higher rates of respiratory and ear infections compared with children who were cared for at home until grade school. Cote defined large day care settings as facilities with at least 100 children.

The apparent trade-off, Cote said, was that these children developed fewer infections after age 5.

The results follow the logic that the more germs children are exposed to, the more likely they are to get sick, said Dr. Henry Bernstein, chief of general pediatrics at Cohen Children's Medical Center of New York, who was not involved with the study.

"There's no question when there's an environment where kids are in close contact — and young kids may not be washing their hands as much as adults — the spread of germs happens more readily," said Bernstein, who is also a member of the American Academy of Pediatrics' Committee on Infectious Diseases.

Cote also found that children who enrolled in small-group child care facilities in early preschool, as opposed to facilities that had larger groups of children, didn't have any more infections than kids who stayed at home. She added that few previous studies examined the impact of group child care on infection rates beyond the preschool years.

Kids who were initially cared for at home and later enrolled at any child care facility had more ear infections between ages 3 ½ and 4 ½, but no other differences in infection risk, according to the researchers.

The researchers did not find a link between gastrointestinal illnesses and group child care at any age.

"Young children do get more gastrointestinal infections, but it doesn't matter later," Cote said. "We do have a protective effect for intestinal infections when we get to grade school."

Bernstein said gastrointestinal illnesses may not be spread as readily as respiratory or ear infections at day care facilities because parents may be more likely to quickly intervene when symptoms — such as vomiting or loose stools — appear. But runny noses or coughs may not attract parents' attention as readily, he said, keeping sick children in day care and increasing their chances of exposing others.

Other studies have shown that repeated, mild respiratory infections at young ages — which stimulate the immune system — can prevent asthma from developing, Cote said.

"I hope people will not worry so much about sending their children to day care in relation to infections. Really, what we are seeing is a natural part of life when we get to large groups," Cote said. "In the long run, it shows day care does not have an impact in the long-term burden of disease. I think it is (an advantage) in terms of the academic aspect."

The study is published in the December issue of the journal Archives of Pediatrics & Adolescent Medicine.

THE LANCET

The Lancet, Volume 297, Issue 7696, Pages 431 - 432, 27 February 1971

TONSILLECTOMY AND HODGKIN'S DISEASE: THE LYMPHOID TISSUE BARRIER

NicholasJ. Vianna, Peter Greenwald , J.N.P. Davies

Abstract

Tonsillectomy increases the liability to the subsequent development of Hodgkin's disease by a factor of 2.9 times. Since appendicectomy has previously been shown to increase the liability to subsequent Hodgkin's disease, it seems that surgical ablation of active lymphoid tissue, and perhaps the natural involution in late childhood of the oropharyngeal lymphoid tissue, in some way facilitate the onset of Hodgkin's disease. A protective barrier is removed.

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Consequences of Excessive Antibiotic Use

By Jane Sheppard

Antibiotics have saved many lives over the past 45 years. We are truly fortunate to have them available for serious bacterial infections. Unfortunately, antibiotics are excessively prescribed, especially to children. The Center for Disease Control estimates that of the 235 million doses of antibiotics given each year, between 20 and 50 percent are unnecessary. Tragically, this overuse of antibiotics can cause devastating health consequences to children.

Antibiotics for Ear Infections

Antibiotic misuse is most likely to occur in children with ear infections (otitis media), the number one reason a child is brought to a doctor. Antibiotic therapy is the most common treatment of ear infections, with amoxicillin being the first choice by doctors. The side effects of amoxicillin include upset stomach, diarrhea, allergic reactions, and diaper rashes. These side effects may seem minor, but are these antibiotics actually necessary for otitis media?

The purpose of antibiotics is to kill harmful bacteria. Otitis media means middle ear inflammation - not necessarily bacterial infection. Many cases are caused by allergies, particularly to milk and dairy products. In a significant number of cases of otitis media, the middle ear contains no harmful bacteria. In a Dutch study of 2,975 children, it was found that 88% of children with acute otitis media did not need antibiotics. Other studies in the U.S. and Scandinavia came to similar conclusions.

Antibiotics have been shown to increase the likelihood of repeat ear infections. One reason is when a doctor prescribes antibiotics the underlying cause of the ear infection is usually ignored and left untreated. For instance, Streptococcus pneumoniae, also known as pneumococcus is commonly found in the nose and throat. This bacterium is thought to be responsible for many cases of ear infections, which is why antibiotics are prescribed. However, your child can have pneumococcus and not be sick. It will only cause trouble if it gets trapped in the middle ear. Once trapped, the bacteria can reproduce rapidly and become an infection. This scenario could be the result of an allergic reaction to a certain food, which can cause congestion as well as significant pressure changes and obstruction to the eustachian tube. In the case of an allergy induced ear infection, eliminating the allergen from a child’s diet or environment will also eliminate the obstruction, allowing the bacterial fluid to drain. However, if an allergic child continues to be exposed to the allergen, repeat ear infections are likely to occur.

Another cause of ear infection may be an obstruction to the eustachian tube, due to misalignment of the bones of the jaw, skull or neck. Craniosacral work, chiropractic care or osteopathy would be especially helpful to release the blockage to allow drainage of the fluid.

Nutritional deficiencies or a weakened immune system can also be factors leading to ear infections. Treating the child with antibiotics without correcting the cause will likely create a continuing cycle of repeat ear infections. Many children are dealing with this. A typical scenario is the child is diagnosed with acute otitis media and antibiotics are prescribed (whether a bacterial infection is present or not). The symptoms disappear in about a week or two, but return again in the near future, since the original cause was not addressed. The child goes back to the doctor for more antibiotics. The cycle continues. Some children spend months or even years on antibiotics, with recurring ear infections. Research has shown that when antibiotics are used at the beginning of an ear infection, the frequency of recurrence may be almost three times greater than if antibiotics are delayed or not used.

Antibiotics Don't Discriminate

Antibiotics do not just go after the pathogenic or “bad” bacteria. They also indiscriminately destroy the beneficial bacteria necessary and vital to good health. Among the more important beneficial bacteria are lactobacillus acidophilus and bifidobacterium bifidus. They help protect the body against infection. Depleting these organisms can disrupt the balance of the body, suppress immunity, and lead to increased susceptibility to infections by fungi, bacteria, viruses and parasites. Additionally, when antibiotics are used excessively, depleting the beneficial bacteria, there may be an overgrowth of yeast in the body. A yeast infection can suppress immunity, which may lead to recurrent infections.

What's more, antibiotics adversely affect many nutrients, particularly the ones needed by the immune system to fight infection, such as vitamins A and C. One of the most common side effects of antibiotics is diarrhea. This causes a loss of nutrients, especially magnesium and zinc. Some children are on antibiotics for months or even years. Nutritional loss over such a long period of time is debilitating for the body and sets up an environment for more infections.

Serious Infectious Diseases Resistant to Antibiotics

A very frightening consequence of indiscriminate use of antibiotics is the development of antibiotic-resistant bacteria. These bacteria have “learned” to outsmart the drugs and have reproduced a generation of stronger, more resistant bugs. Consequently, there are some serious infectious diseases that are no longer responding to antibiotics. If an infection does respond, it often requires five to ten times the amount of the drug that used to be effective.

When your child is continually treated with antibiotics, the bacteria in his or her body may eventually be able to survive the drugs, making it much harder to cure an infection. In the event of a serious bacterial infection, such as meningitis, a much higher dosage of antibiotic may be required or a doctor may have to try different drugs before finding one that will work. The time this takes can potentially be a matter of life or death, since meningitis can be fatal and needs to be treated immediately. Unfortunately, with each try at a different treatment, the bacteria are given another chance to build up their resistance against even more powerful drugs.

Antibiotic resistance can affect the whole family and everyone around the child with a history of frequent antibiotic use. If the child develops resistant bacteria, he or she can pass them along to others through coughing, sneezing, and kissing.

What Else is Your Child Ingesting with the Antibiotic?

Sweeteners, dyes, flavorings, and other unnamed additives are found in antibiotics prescribed to children. These may include saccharin, sucrose, red dye #40, FD & C yellow #5 and #6. These dyes are cross-reactive with aspirin and acetaminophen, which are commonly given to a child during an illness. Even tiny amounts of the chemical additives in antibiotics can cause an allergic reaction in a sensitive child. It's important to always get a full disclosure of the contents of the drug being considered if your child has allergies or environmental sensitivity. Ask the pharmacist for the insert that comes with the medication.

Treat Colds and Flu with Antibiotics?

A truly disturbing practice is the prescribing of antibiotics by some doctors to treat colds, coughs, runny noses or flu. Most upper respiratory infections are viral. Treating them with antibiotics is clear and blatant misuse, since the drugs kill only bacteria and are of no value at all in treating viral infections. There are treatments that can relieve the symptoms of a cold, but there is no drug (over-the-counter or prescription) that will cure a cold.

Save Antibiotics for the Serious Infections

In the book Beyond Antibiotics: 50 Ways to Boost Immunity and Avoid Antibiotics, Drs. Schmidt, Smith and Sehnert suggest that you ask your doctor the following questions when antibiotics are being prescribed. It is good to get all the answers you can before making a decision.

Are you sure it is bacterial?

Are you sure it is the right antibiotic?

Should a culture be performed?

Are there alternatives to antibiotics?

What are the risks if we don't use them?

What are the risks if we wait one or two or four days?

Are there dietary or nutritional factors that need consideration?

Should vitamins be prescribed along with the antibiotic?

Should probiotic supplements be given to minimize the intestinal effect of the antibiotic?

Have you considered or investigated the role of food allergy?

If your doctor is not willing to explore these questions, you are justified in getting another opinion. There are many doctors who will be your health partner and explore these issues with you.

Antibiotics may be absolutely necessary in certain situations, such as a life-threatening infection or when serious complications are present. For instance, if your child has symptoms of bacterial meningitis, there is no time to waste. He or she should be taken immediately to a doctor for antibiotics. We are very fortunate to have antibiotics for appropriate situations. However, antibiotics should be used in conjunction with methods that strengthen the immune system, and the depleted beneficial bacteria should always be replaced. Most importantly, the cause of the infection needs to be addressed for true healing to take place.

Avoid the Tonsillectomy!

A surgical solution for minor tonsil and adenoid problems is not better than simple TLC and waiting, according to a team of Dutch researchers.

A study of 300 patients found there was little difference in reduction of symptoms between the 150 children who had tonsillectomies and those that did not. In fact, during the 18 months following the procedures, there was no difference in the groups.

Experts say this research backs the trend of declining tonsillectomies in the United States, which dropped from more than 1 million annually in the 1970s to 250,000 that are now performed each year.

However, in other countries like the Netherlands, tonsillectomies remain the standard course of action for recurrent upper respiratory infections.

Some physicians have developed another strategy that involves the parents. These doctors encourage parents to monitor their children for unusual occurrences. They tell parents to administer anti-inflammatory drugs and analgesics, as necessary, to calm pain and fever.

Some experts add that there are cases when surgery is required.

One example they give is when tonsil or adenoid problems severely disrupt sleep and breathing. Other physicians set benchmarks for frequent problems such as a certain number of infections each year or consistent infections over time. Antibiotics may be prescribed but, according to research, they have limited effectiveness in these situations.

British Medical Journal September 11, 2004;329(7466)

Why fevers can actually be good for you

(NaturalNews) Fevers are actually the body's way of fighting bacterial infections. So many parents think that they are doing the right thing by rushing for medication to try to 'break' the fever when it strikes, but in actual fact, this is doing a lot more harm than good. Studies have found that aspirin and other fever-reducing medications actually suppress the production of antibodies, thus resulting in the infection lasting for up to 50% longer than it should.

On average, a body temperature of 37C/98.6F is considered 'normal.' This doesn't take into account the fact that children are generally warmer than adults. Recent exercise, dressing too warmly, consuming hot foods, and even the menstrual cycle in teenage girls can cause the body temperature to rise by a degree or two.

Fevers tend to hit their highest point at late afternoon, so if your child's body temperature is slightly higher than normal at that time, it is generally no cause for panic. But if your child awakens and has a low-grade fever, you may want to encourage him/her to stay at home and get some rest, so that the fever can do its job of fighting any infections which may be present.

Causes of fever most commonly include infections, dehydration, vaccinations, medications, tumors, juvenile rheumatoid arthritis, inflammation and teething in infants.

The only time a fever can do harm is when it rises above 106F/41C. It can them do harm to the brain and heart. Although, during most infections, the brain will do its job of keeping the body temperature at around the 104C/40F mark.

There are however times when medical attention should be sought for high fevers. These include fevers in children younger than 3 months, who have a fever of more than 100.4F. (While waiting for medical attention, try to breastfeed the infant, as mothers' milk contains natural antibodies made at the breast as it comes into contact with the pathogens in the baby's mouth.)