Candida - An Explanation

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Each one of us carries about four pounds in weight of microbes in our intestines. These are minute living organisms which include bacteria, protozoa and fungi. In a healthy individual about 80% of these micro-organisms are incredibly beneficial to us. The other 20% have their role to play within a healthy balance of organisms. However in certain circumstances they can quickly proliferate leading to an imbalance or dysbiosis of organisms. The most prolific and opportunistic of these unfriendly microbes is the fungi species Candida, predominantly Candida Albicans.

This was first discovered by American Physicians in the 1970's. Its existence however still remains controversial.

Often candida initially spreads in the gastro-intestinal tract (GI). Firstly GI symptoms may present; nausea, bloating, gas, heartburn, indigestion, constipation and/or diarrhoea. Food cravings for sugar, starch and alcohol may begin as these are the foods on which the candida thrives and so demands.

When candida proliferates it changes from a harmless yeast spore into a fungal form. It then grows whiskers known as rhizomes, beginning to look much like mould. It becomes very strong in this form and can start to suffocate the more beneficial microbes.

In this fungal form, using the rhizomes to burrow, it is then able to break through the intestinal wall leaving it porous. This then allows both toxins and minute particles of incompletely digested food particles to pass into the bloodstream. An onset of food sensitivity can often then be seen. In addition to this the immune system comes under heavy strain and is weakened in its fight against candida and other invaders.

Once into the bloodstream candida can then get into any part of the body; muscles, joints, skin, mucous membranes and cavities such as the sinuses. With such a free rein it begins to set up colonies throughout the body and symptoms begin to grow more diffuse, leaving a person to feel "ill all over". Yet, one can be totally unaware of its presence.

The idea of systemic candida is still often overlooked by doctors and many individuals know nothing of it. The real problem is that, because we all have some candida in us, almost any test will show up as "Positive". Oropharyngeal colonization is found in 30-55% of healthy young adults, and Candida species may be detected in 40-65% of normal fecal florae. Three of every 4 women experience at least one bout of vulvovaginal candidiasis during their lifetime (Hidalgo 2010).

So, we know we've got it; what we need to know is how much of it we've got and where it's hiding. Candida does not just live 'loose' in the gastrointestinal tract but burrows into the gut walls. Only when pieces get broken off by passing faeces will candida actually be present in a stool specimen. However, looking at how much candida we have in our gut will not bear any significance to how much candida we may have in our sinuses or our knees. Laboratory tests which look for antibodies to candida will only show how much the immune system is reacting to the presence of candida,and will not bear resemblance to the actual amount of candida which is causing problems. This can also be misleading as the immune system is often so badly affected by candida that it cannot react appropriately to the test.

Causes of Candida overgrowth (Candidiasis) - Erica White (2011)

SUGAR - this is the first major cause of candida overgrowth. In order to be healthy, our bodies actually need no more sugar than that which is found naturally in fruits, vegetables and grains. Yet, sugar now features so heavily in our diets that we consume roughly our own body weight in sugar every year. This creates a huge surplus of sugar in our bodies which helps the candida thrive, along with creating other problems such as obesity. Not only are sugars added to our foods, we also choose to add it to drinks like tea, coffee and hot chocolate. There are also many different names for sugars which can be deceiving; sucrose, fructose, lactose, dextrose, corn syrup, molasses, xylitol, agave syrup, to name just some. Often sugar is “hidden” in the least obvious of foods making us unaware of its presence. Many of us are also unaware that all refined grains convert very quickly into glucose. This includes white flour (commonly used for bread, biscuits, cakes) and white rice.

ANTIBIOTICS - not only are these prescribed frequently by doctors, we also ingest them through eating meat and drinking milk. Modern farming methods use antibiotics to prevent animals from getting sick thus increasing their production. Broad spectrum antibiotics will wipe out all bacteria in our intestines, and as candida is one of the strongest microbes it re-establishes more quickly than others. This allows it to proliferate and inhibits the re-colonisation of beneficial bacteria, causing gut dysbiosis. Antibiotics are indeed lifesavers in emergency situations, but in many cases are over prescribed. They can be taken for months on end to treat acne, or can be used repeatedly for recurring infections. When taken several times in one year this will have a devastating effect on the balance of our bacteria and thus our immune system.

HORMONE TREATMENTS - HRT, the contraceptive pill and hormone pills for menstrual problems will all encourage candida to thrive. Imagine what devastation can be caused to those who are prescribed antibiotics for acne, take the contraceptive pill and have a diet high in sugar. Due to the hormonal aspect candida affects more women than men, although men can also suffer and be very ill as a result of its presence.

If you were carrying vaginal candida at the time of giving birth, it would almost certainly have been the first microbe which entered your baby’s gut through his mouth on his journey through your birth canal. Prior to birth, a baby’s intestines are completely sterile, and in a healthy situation the first microbes to get in are friendly bacteria provided by the mother’s breast milk. However, if candida has got in first, the battle is on from the baby’s first moment of life in the world. The baby is then likely to suffer from colic, nappy rash and/or eczema, and will be predisposed to food sensitivities, ear problems and asthma. Unfortunately, antibiotics and steroid treatments simply make the matter worse.

STEROIDS - not only can diet, antibiotics and hormone treatments encourage candida, but so can steroids. Steroids increase our blood sugar levels and this higher level of sugar in our blood will only further feed the candida. Topical skin creams are absorbed through the skin into the bloodstream and steroid inhalants given for asthma will also flood through our system.

Candida and Transverse Myelitis

We know that for some TM sets in following a virus or similar illness. For others it can be an idiopathic onset (no known cause). With the immune system now compromised, systemic proliferation of candida may then be more likely to occur. Not only will TM be attacking the immune system but so may the candida - a double onslaught. By reducing the prevalence of the candida, a load can be taken off the immune system allowing the body more strength to fight against TM. Of course, it is not suggested that treating candida may be a cure for TM, only that symptoms may begin to improve. It should be noted that steroids, one of the main treatments for TM, are one of the four major causes of candida overgrowth.

Lack of clinical research in this area does not allow for a definitive answer as to whether candida is indeed involved in patients suffering with TM, however anecdotal evidence suggests that there may be a link. Certainly individuals with disorders such as ME, fibromyalgia, osteo and rheumatoid arthritis have seen great improvements in many of the same symptoms shown by TM sufferers when an anti-candida programme has been followed.

One clinical study which investigated the association between multiple sclerosis and candida suggested that Candida species infection may be associated with increased odds of MS after finding a higher incidence of candida presence in MS sufferers when compared with control subjects (Benito-Leon et al, 2010). It is also well known that illnesses which result in immunodeficiency show a high prevalence of candida. Candida species are the most common cause of fungal infection in immunocompromised persons (Hidalgo, 2010). Hidalgo also quotes that more than 90% of persons infected with HIV who are not receiving highly active antiretroviral therapy (HAART) eventually develop oropharyngeal candidiasis, and 10% eventually develop at least one episode of esophageal candidiasis.
The management of serious and life-threatening invasive candidiasis remains severely hampered by delays in diagnosis and the lack of reliable diagnostic methods that allow detection of both fungemia and tissue invasion by Candida species (Hidalgo 2010).

Stress will also play a huge part in encouraging the presence of candida. When under pressure the body produces adrenalin. This adrenalin is then released into the bloodstream which in turn causes a rise in blood sugar, allowing the candida to feed. So, stressful situations like divorce, job loss, house move or the death of a loved one are all possible contributors to the onset or exacerbation of candida. Inevitably, stress will play a part in the lives of TM sufferers.

Furthermore, the air we now breathe is full of traces of poisonous metals - lead and cadmium from traffic and factory chimneys are just two. In addition, many of us are absorbing aluminium from antiperspirants, antacid tablets and cooking pans, and most of us are absorbing traces of mercury from the amalgam fillings in our teeth. Our bodies were not made to cope with such a load of poisons, and our immune systems are over-worked - often to the point of exhaustion. Our modern day perception of health has become very diminished and we often accept good health as being simply the absence of disease or disorder. However many of us now live with exhaustion, skin problems, food allergies and intolerances, and so have never actually known what it is to be truly healthy.

There are many factors to consider both in the presence of TM and the potential presence of candida. The aim of this document is to raise awareness that candida may be a contributing factor to some of the symptoms of TM.

To see the symptoms of candida and whether they could be relevant to you, please check out the following candida score sheet
http://www.beatcandidapack.com/candida_score_sheet.php

References

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