POLYSYSTEMIC CHRONIC CANDIDIASIS or IS THERE A FUNGUS AMONG US

BACKGROUND

How often have we hesitated or not used a medication or therapy because the academic medical experts, claiming they represent the main stream of medicine, have pronounced that therapy useless or questionable. In the same vein, are there not conditions or syndromes, which we see everyday in our offices but which these "experts" claim do not exist or are "fad" diseases. Some of the time they are right, but not always. It is my hope that by redressing one of these controversies that it can be given a second look.

The story begins a number of years ago when a new patient told me that she had heard that I had an open mind and would listen to what her problems were. She then asked if I would renew her prescription for nystatin before she forgot to ask. I wrote out the prescription, handed it to her, and proceeded (without commentary on the prescription despite my curiosity) with my usual initial questions reviewing her past and present medical history.

This patient's main problem was lingering Pre-menstrual cramping. The cramps were not helped by the usual anti-inflammatory agents; which upset her stomach. A second problem was "heartburn" after meals and upon lying down - especially at night. As the story progressed I found out that this 42 year old woman **had**, in the past, a variety of complaints including a long history of headaches, lethargy, loss of energy, frequent diarrhoea associated with an intolerance to many foods, troublesome gas and bloating with many meals, and rather severe PMS with a painful menstrual flow noteworthy for its large blood clots. The remainder of her system review was unremarkable. The medications she listed included Nystatin, acidophilus capsules and four different vitamins and mineral preparations.

She then told me that I was the first to readily let her continue the Nystatin - which "dozens" of physicians had refused her or given her a hard time over it. I told her that her request was for a very safe, almost innocuous agent, which was so poorly absorbed from the gastro-intestinal tract that it is considered non-absorbed, and that it had a very low - enviably low - side effect profile. In fact, this drug is unquestionably safer than Tylenol or Advil. I said that the only effect that I knew about was that it would suppress the growth of a number of fungi or yeasts in the G-I tract. I had reasoned that she would tell me why sooner or later, but now that she had brought it up, I asked her for which of her past symptoms had she been given this agent. Her reply, "...all of them..." was a surprise.

She then related that, after years of not feeling well and seeing legions of doctors without any results, she had been given a book entitled "The Missing Diagnosis" and then she read "The Yeast Connection". From these two books she came to believe that most of her symptoms were caused by the presence of too many yeast organisms in her body. Needless to say she had not been well cared for by the medical profession so had turned to an alternative health care system. How many more are out there like her I can only guess.

I had not read either of those books at that time but did make a mental note that I had more than a few patients with some, if not many, of the symptoms that she claimed were helped by Nystatin and diet. In view of the fact that this drug was not absorbed and therefore most likely had almost no systemic side effects and there was no known adverse effect of reducing the intestinal yeast count, I knew that I would check this out on at least a few of my patients.

In the meantime, I recommended pyridoxine (Vitamin B_6) in a dose of 50 mg per day to be increased up to 4-fold at the first sign of any PMS symptoms. I also recommended metoclopramide in a dose of 5 mg to be taken in advance of large meals and at bedtime. In addition, I made the usual dietary suggestions and recommended a two-inch elevation of the head of her bed. This patient's presenting complaints soon became part of her past medical history. This should amaze none of us but what follows may.

The first patient to whom I gave Nystatin had many G-I complaints headed by excess gas and bloating with a large number of foods such that her diet was quite limited. Very loose stools often bothered her and only later did she tell me that she had experienced headaches for years. To her they were part of living so she hadn't bothered to mention them. You can imagine my pleasant surprise coupled with some wonderment when first one, then another, and, by now, hundreds of patients have come back after a few weeks on Nystatin with very happy smiles and stories about how they finally feel "normal" again. This after years of knowing that something was wrong but nobody took them seriously. I knew well the placebo effect and had been careful not to suggest more than the idea that this agent was useful in decreasing gas and bloating. On that point I was on relatively sure, medically sound, grounds. I could hardly suggest that an anti-fungal agent would be useful in reducing headaches, or PMS symptoms, or general feelings of ill health.

The books mentioned by my reference patient were, to me, confusing rather than enlightening most probably because of my scientific training. The list of symptoms "caused" by yeasts appeared as subjective as it was endless. With most of the listed symptoms it would have been very difficult to satisfy Koch's postulates or any other scientific criteria. In addition, the interconnecting logic made "leaps of faith" which exceeded my own reasoning mechanics and which, in my view, added little to their creditability. Despite these shortcomings, the basic premise that too much candida albicans (and/or other similar organisms) could produce annoying and sometimes incapacitating symptoms and that these symptoms could be reduced by anti-fungal therapy, coupled with diet, has proven to be true unless Nystatin has some action or effect presently unknown.

I still do not know the mechanism by which Nystatin ameliorates the broad spectrum of symptoms with which these patients present. As far as I know, these polyene anti-fungal agents have no other effect other than altering the permeability of the fungal cell wall such that the organism cannot survive. This effect is not limited to the dimorphic candida albicans but includes other hyphae forming organisms.

HOW TO DIAGNOSE

Over the last number of years that I was in practice, I found that there are some symptoms, which occur with high frequency and others, which occur in only some, or a few, patients. I am still not sure if the syndrome has a spectrum from mild to severe with more symptoms as the severity progresses or the severity is dependant on other factors, predisposing states, or one of its "causes". In any case, those symptoms showing the greatest frequency can be considered the Primary or Major criteria and those that are seen less frequently can be considered the secondary or minor criteria.

The Primary or Major Criteria that are most often reported by patients are the following:

1) Gas and Bloating with meals
2) Bowel irregularities (diarrhoea to constipation)
3) Assorted intolerance to foods
4) Headaches
5) Pre-Menstrual Syndrome (especially with clotting)

The Secondary or minor criterion which are less frequently seen and which are usually refractory to standard medical therapies are the following:

1) Easy fatigability or loss of energy
2) Depression or lethargy
3) Feeling "strange", "unreal", or "spacey"
4) Irritability
5) Craving for sugar
6) Frequent vaginal yeast infections
7) Frequent bouts of cystitis
8) Frequent or continuous sinusitis type symptoms
9) Unexplained sometimes migratory arthralgia
10) Vague and non-descript skin rashes and eruptions

In addition to these "criteria", but less frequently, patients complain of persistent fungal infestations of the ears and/or feet, nondescript muscle weakness, tender swollen breasts during the menses, and a loss or reduction of libido. In infants and young children, the presenting complaint is often a colicky baby with an irritating diaper rash. The problem with many of these symptoms is that they are non-specific and do not fit into the generally held almost innocuous character of the ubiquitous candida albicans.

From my experience, the criteria cannot be dogmatically required such that a certain number of major criteria and/or a certain number of minor criteria are needed to make the diagnosis. Rather, the "criteria" should be used as markers or sensitizers for physicians to the possibility that their patient may have the problem and would, most likely, benefit from therapeutic intervention. It is indeed a pleasant experience to have patients return visibly gratified by the difference in how they feel when compared to how they felt prior to treatment. Few problems we treat in medicine are as rewarding.

The typical patient is a female who has bounced around the health care system from doctor to

doctor. She has been seen and unsuccessfully treated by Family Physicians and possibly several Internists, Allergists, and Gynaecologists. She has not been relieved of her symptoms and is desperate for help. Is it any wonder that she has been branded a psychosomatic hypochondriac or that she has gravitated to one of several non-medical health care practitioners?

To make matters worse, third party insurers in some states have taken the position that they will not reimburse for the "Chronic Candidiasis Syndrome" because they do not consider the treatment "medically necessary" and, furthermore, their "experts" tell them that there is "No such disease". It may be that this condition is not a "disease" or even a "syndrome" in the usual sense but the symptoms are real and the treatment works. Mainstream medicine seems to have invalidated a problem and its treatment just because they could not explain how or why it works.

PREDISPOSING FACTORS (CAUSES)

All conditions in medicine have a cause or causes and this condition, which has been called Polysystemic Chronic Candidiasis (PCC), is no exception. Common to all patients who present with the symptoms outlined above is usually one or more of the following:

1) Use of broad-spectrum antibiotics especially over long periods of time
2) Long term use of steroid drugs in the corticosteroid and oestrogenic steroid classes
3) Large quantity or long time consumption of yeast and mould containing foods
4) Large quantity or long time consumption of sugar and other simple carbohydrates
5) Contact with drugs or chemicals that tax or stress the body's ability to detoxify. These agents include pollutants, household chemicals, alcohol, recreational drugs and Cigarette smoking especially in large quantities
6) Environmental contact with conditions ideal for the flourishing growth of fungi such as the dampness and coolness of some basements. If it smells musty or mouldy it probably is and should be avoided.
7) Alterations in the integrity of the bodies defence systems such as major surgery, stress, or immunosuppressive therapy.

These points describe the late 20th century. Physicians have at their disposal a wide range of new and potent and effective antibiotics and use them freely probably because they are not only effective but also are relative free from side effects - at least for the short run. The use of the steroids to control the ovulatory cycle is almost a rite of passage for young women before and after marriage. There are ever-increasing numbers and increasing potency (read toxicity) of chemicals which the population is exposed to on a daily basis. It is not difficult to postulate that this exposure is attended by some risk and that one of the risks is a reduction in the bodies' general defence mechanisms. Hard to prove for sure, but definitely reasonable.

TREATMENT

The cornerstone of the therapy of this condition is the anti-fungal agent Nystatin (Nilstat^{R}, Mycostatin^{R}). The tablet form is the most readily available and most acceptable to patients. It is

possible that the powdered form is more effective especially for the oral-nasal-pharyngeal area but patient acceptance relegates its use for only the most severely affected. The tablets contain 500,000 units and are usually prescribed three times a day with meals. This regimen may be needed for up to six months depending on the severity and length of time the symptoms have been present. Compliance is usually not an issue as the difference between how the patient felt before therapy and after therapy has begun is most noticeable.

There are two liquid forms; In the U.S. the concentration is 100,000 units per 5 ml (1 tsp) and in Canada it is 100,000 units per 1 ml. For infants, I recommend 50,000 units twice a day and for toddlers, 50,000 three times a day (the treatment of choice for the "colicky" baby – in my opinion). By age 5 use the adult dose twice a day and by age 10, three times a day.