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Acute Allergic Vaginitis Caused by Candida Albicans

SUMMARY

Vaginitis is a common condition observed in family practice and in office gynecology. One of the organisms which commonly causes vaginitis is candida albicans, which is commonly found as a saprophytic organism. However, apparently allergic reactions to candida causing vaginitis are not commonly known or recognized. In fact, only one series has been reported in the literature, and this was related to chronic monilial infections. In my practice I have encountered five cases of acute vaginal allergic responses to monilia over the past 15 years. These cases, with an account of control subjects, form the basis of this article. (Can Fam Physician 1984; 30:449-452).

SOMMAIRE

La vaginite est une infection fréquemment observée en pratique familiale et au bureau du gynécologue. Un des organismes communément responsables de la vaginite est le candida albicans que l'on retrouve couramment comme saprophyte. Toutefois, certaines réactions au candida, d'allure allergique et causes de vaginite ne sont généralement pas connues ou identifiées. En fait, une seule série a été rapportée dans la littérature, et elle était reliée à des infections chroniques au monilia. Dans ma pratique, j'ai pu observer cinq cas de réponses vaginales allergiques aiguës au monilia au cours des 15 dernières années. Ces cas, avec la description des sujets contrôles, forment la base de cet article.

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VAGINITIS IS A common condition observed in family practice and in office gynecology. One of the organisms which often causes vaginitis is candida albicans, which is commonly found as a saprophytic organism. While allergic reactions to candida which cause vaginitis are not commonly known or recognized,¹ I have encountered five cases of acute vaginal allergic responses to monilia

over the past 15 years. These cases are described below.

Case No. 1 Mrs. D.A. (b. 1944)

In 1972 this patient began to have acute attacks of vaginitis, and on examination had a mild, thick, whitish discharge with a few typical adherent plaques on the vaginal wall. Both the vagina and labia would be acutely swollen and extremely red, with severe itching. Cultures taken on many occasions grew only candida. Mrs. D.A. was initially treated with vaginal suppositories of nystatin (Mycostatin) preparations. The vaginitis would clear, but promptly recur, necessitating treatment again. She experienced a total of eight episodes of acute vaginitis within four months.

At the same time, Mrs. D.A. was

suffering from severe hay fever, and in November 1972, I decided to give her a skin test for the hay fever. I tested her for candida while doing the skin testing. The allergy testing showed a 4+ reaction to house dust, feathers and grasses, and a similar reaction to candida. A 4+ reaction is characterized by a wheal greater than 12 mm in diameter, pseudopodia and an associated erythema around the area of reaction. There was no reaction to trees, flowers, fabrics and many other common allergens.

Because of the severity of the hay fever symptoms, the patient decided to try desensitization injections. She began having injections of house dust antigen because the clinical history showed this was the most bothersome allergen. Candida was also injected, to see if it might help her vaginitis.

The injections were started in late November, 1972. They were given weekly until April 1973, and then every three weeks until October 1974. Since at that time Mrs. D.A. had been nearly free of hay fever for six months, I decided to discontinue the injections. While she was receiving the injections, Mrs. D.A. had one episode of vaginitis in January 1973. She was symptom free until April 1973 when she had another episode. Then she didn't have another recurrence until September 1974.

Since that time she has had occasional episodes of a mild discharge, usually just before her menstrual period. However, she has not had any further episodes of severe swelling or itching associated with the discharge. The marked redness of the vagina which was formerly present, is no longer evident with these more recent infections. In fact, cultures have shown candida to be present on occasion, but there is no clinical reaction to it.

Case No. 2 Miss C.H. (b. 1958)

This patient was first seen for vaginitis in January 1975. Again, there was a typical appearance of a mild candida vaginitis, and candida was cultured from the vagina. The vagina was red and swollen and the patient complained of considerable itching in the vaginal and perivaginal area. She was treated with nystatin for attacks which occurred at approximately four month intervals during the next few years. In March 1978 she started having nearly continuous episodes of vaginitis, which cleared with treatment. However, she would begin experiencing discomfort about two weeks after she stopped taking the medication.

In December 1978 Miss C.H. had a skin test that showed a 4+ reaction to candida. There was no reaction to any other allergens such as house dust or pollens. A CBC was normal except for 7% eosinophils. I decided to treat her with chlorpheniramine maleate (an antihistamine), 8 mg three times a day. This controlled the problem, but as soon as she stopped taking the chlorpheniramine maleate she started to suffer from itching and all her symptoms recurred.

Desensitization injections to candida were started in June 1979. By September 1979 Miss C.H. was no

longer taking chlorpheniramine maleate, and had had no further attacks of vaginitis. She had not had any attacks up to early January 1983. Allergy injections were discontinued in September 1980.

Case No. 3 Miss C.D. (b. 1971)

This patient began to have a vaginal discharge in September 1980, and saw a gynecologist. He treated her with Mycostatin three times during the next two months, but the irritation returned within a week of the medication being stopped. On examination, the vaginal mucosa was swollen and extremely red; no discharge was apparent. Cultures showed candida was present. The patient complained of severe itching. I decided to treat her with chlorpheniramine maleate, 4 mg prn. When I saw her two weeks later, her vagina showed no signs of swelling or redness, and there was no itching. Subsequent monthly visits have revealed she has had to continue to take the chlorpheniramine maleate fairly regularly, as the symptoms promptly recur when the medication is stopped. I plan to give her a skin test, but desensitization treatment will be initiated only if the symptoms persist.

Case No. 4 Miss S.S. (b. 1971)

This patient presented with itching of the vaginal and perineal area. On examination there was no obvious vaginal discharge. However, the mucosa was extremely red, tender and swollen. A swab was taken, and monilia grew on culture. She was treated with chlorpheniramine maleate 4 mg four times a day for two weeks. On re-examination two weeks later, the redness, itching and swelling had disappeared. No further investigation has been done yet, but the approach will be similar to the above case; antihistamines will be used as the first therapy.

Case No. 5 Mrs. J.R. (b. 1951)

This patient started to have recurrent attacks of vaginitis in July 1980. Again, the vaginal mucosa was swollen, red, and extremely itchy. There was very little discharge. Some typical plaques of candida were present on the vaginal walls. Cultures showed candida was present. The patient's

symptoms cleared promptly with Mycostatin or any of the anti-candidal preparations, but recurred immediately when therapy was discontinued. Skin testing showed a 4+ reaction to candida. Treatment with chlorpheniramine maleate was unsuccessful; she obtained no relief from the symptoms or signs.

No decision has been made yet about desensitization treatment for this patient.

Skin Test Of Other Patients

Some skin testing was done on other patients to estimate the number of women who would have an allergic reaction to monilia. Ten patients who had no vaginitis or history of vaginitis for at least three years were selected. Because of their lack of symptoms, these women were not given vaginal cultures for candida. Three had a 1+ reaction to skin testing. This was characterized by an increase in the wheal size to less than 5 mm with associated erythema. Miss C.H.'s mother, who was a member of this group, had no reaction to skin testing.

At the same time, ten patients with monilial vaginitis were also tested. Two of these had a 1+ reaction. These patients also had vaginal cultures which were positive for candida. Their infections were similar to those of the five women in the case histories. There was a thick discharge, and plaque formation on the walls of the vagina. However, there was not such marked redness of the vaginal walls or of the outer labia. Again, although itching was frequently a presenting complaint, the itching was not so intense in this group. Of these ten patients, two were known to have allergies; one was asthmatic and the other had hay fever. The patient with hay fever had a 1+ reaction to skin testing, while the patient with asthma had no reaction. The remaining eight patients had no reactions.

The three patients in the original group of five who had skin tests had a 4+ reaction.

Discussion

Allergy to candida can be a very aggravating condition, and is probably more common than suspected. Pulmonary allergies such as 'teataster's cough' have been reported in the past. 'Teataster's cough' is caused by inhal-

◆ Talwin • Tablets

pentazocine hydrochloride tablets N.F.

INDICATIONS: Talwin (pentazocine hydrochloride) is indicated for the relief of chronic or acute pain of moderate to severe degree.

CONTRAINDICATIONS: Talwin (pentazocine hydrochloride) should not be administered to patients with known hypersensitivity to pentazocine.

Use in Pregnancy: The use of Talwin in women of childbearing potential requires that the expected benefit of the drug be weighed against the potential risk to the mother and fetus.

Use in Children: Clinical experience in children under 12 years of age is limited, therefore, use of Talwin is not recommended in this age group.

WARNINGS:

Drug Dependence: There have been reported instances of psychological and physical dependence upon parenteral Talwin (pentazocine lactate). These reports have primarily concerned patients with a previous history of drug abuse, although there have been instances reported in patients without such a history. Usually there was a description of an increase in the dose and frequency of administration by the patient. In these patients abrupt discontinuance of the drug often resulted in withdrawal symptoms including abdominal cramps, elevated temperatures, rhinorrhoea, restlessness, anxiety and lacrimation. There have been reports of dependence upon oral Talwin (pentazocine hydrochloride). Consequently, patients who may be prone to excessive usage of drugs should be supervised carefully during oral Talwin therapy. During chronic use of Talwin, the physician should avoid unnecessary escalation of the dose and should take precautions to avoid increases in dose by the patient. Physicians should warn the patient against the use of Talwin in the anticipation of pain.

Head Injury & Increased Intracranial Pressure: The respiratory depressant effects of Talwin and its potential for elevating cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a pre-existing increase in intracranial pressure. Talwin can produce effects which may obscure the clinical course of patients with head injuries. Talwin must be used with caution in such patients, and only if its use is deemed essential.

Acute CNS Manifestations: There have been reported instances of the acute onset of hallucinations (usually visual), disorientation, and confusion in patients receiving therapeutic doses of Talwin. These manifestations have cleared spontaneously within hours upon discontinuation of the drug. The mechanism responsible for this reaction is not known. Patients demonstrating this reaction should be closely observed and if therapy with Talwin is to be restarted, administration should proceed cautiously since the acute CNS manifestations may recur.

PRECAUTIONS:

Ambulatory Patients: Since CNS effects have been noted with the use of Talwin (pentazocine hydrochloride) ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Patients Dependent on Narcotics: Because Talwin is a weak narcotic antagonist, patients who are addicted to narcotics may experience withdrawal symptoms and therefore, Talwin should be given with special caution to such persons. In non-addicted patients receiving narcotics for a short period, symptoms believed to be related to antagonism may be observed. Intolerance or untoward reactions are usually not observed following administration of Talwin to patients who have received single doses of or who have had limited exposure to narcotics.

Impaired Renal or Hepatic Function: Although laboratory tests have not indicated that Talwin causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment. Extensive liver disease appears to predispose to a higher incidence of side effects (e.g. marked apprehension, anxiety, dizziness, sleepiness) with the usual clinical dose, and may be the result

of decreased metabolism of the drug by the liver.

Sphincter of Oddi: Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used with caution in patients with acute cholecystitis or pancreatitis or in those about to undergo surgery of the biliary tract.

Obstructive Uropathy: Because urinary retention has been observed in a few patients receiving Talwin, caution is advised in administration of the drug to patients with obstructive uropathy.

Respiratory Conditions: Respiratory depression has rarely been reported after oral administration. However, Talwin should be administered cautiously to patients with respiratory depression due to any cause, severely limited respiratory reserve, severe bronchial asthma, other obstructive respiratory conditions or cyanosis.

ADVERSE REACTIONS: The most frequently observed reactions after oral administration of Talwin (pentazocine hydrochloride) are sedation or somnolence, vertigo, nausea and vomiting, each of which may occur in approximately 15% of patients. Sedation may be more marked in the elderly. Less frequent reactions have been: **Gastrointestinal**—constipation, abdominal distress, anorexia and diarrhoea; **CNS**—euphoria, lightheadedness, headache, dizziness, weakness, disturbed dreams, hallucinations (see Acute CNS effects in Warnings), visual disturbances, insomnia, tinnitus, irritability, excitement; **Autonomic**—sweating, infrequently flushing or chills; **Cardiovascular**—infrequently fall in blood pressure, tachycardia; **Allergic**—infrequently rash and rarely urticaria, erythema and oedema; **Haematologic**—rarely depression of white blood cells (especially granulocytes), which is usually reversible, moderate transient eosinophilia. **Other**—pruritus, alterations in maturation. Scattered reports of abnormal liver function of questionable significance were noted during the clinical trials. Hallucinations were noted to occur more frequently when doses exceeding that recommended were employed.

DOSAGE AND ADMINISTRATION:

Talwin Tablets: The usual adult starting dose is 50 mg every 4 hours after meals. Dosage should be adjusted to individual requirements and tolerance within the range of 50-100 mg (1-2 tabs) every 3 to 4 hours.

Concomitant Medication: When anti-inflammatory or antipyretic effects are desired in addition to analgesia, A.S.A. can be administered concomitantly with Talwin. In light of the tendency to marked sedation among the elderly dosage should be kept low in this group of patients.

Duration of Therapy: There have been rare reports of withdrawal symptoms upon abrupt discontinuance of Talwin therapy after prolonged administration of the product for chronic pain. Therefore, it would be prudent to reduce the dose gradually when the drug is no longer required.

DOSAGE FORM:

Talwin Oral: Scored peach tablets of 50 mg, bottles of 100 and 500; also available as individually stripped tablets, packages of 24. Each tablet contains Talwin (pentazocine hydrochloride) equivalent to 50 mg base.

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ing yeasts associated with tea leaves.² Yeasts have also been implicated as allergens among grain handlers, although molds are more commonly responsible.² Two cases of asthma due to candida have been reported.³ We should consider the possibility of an allergy to candida whenever the symptoms, swelling and redness of the vagina are inconsistent with the amount of discharge. This was the case with all five patients described in the above case histories; the amount of discharge was similar to that seen in many patients with no vaginal infection.

Conclusion

Antihistamines should be used to treat this condition initially, because most patients respond well. Then there is time to consider other treatments, such as desensitization—a procedure which is not without its own hazards. Two patients in Winnipeg died after injections for pollen desensitization.⁴ Because few people have been desensitized for monilia, we have no information about the potential risks of desensitization for yeasts compared to desensitization for pollens. Both desensitization treatments must therefore be considered dangerous, and should not be started unless the problem is severe enough to warrant a hazardous procedure. In the only other reported series, desensitization was reported to have good to excellent results for 90% of 70 patients with chronic monilial infections.¹

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