Acute rheumatic fever

To the editor: In his article "Acute rheumatic fever" (*Can Med Assoc J* 111: 818, 1974) Dr. G. R. Cumming states that to prevent recurrences of rheumatic fever most of his patients are asked to take oral penicillin, 200 000 units twice daily; if the patient's compliance is likely to be poor, bicillin, 1 200 000 units once a month, is recommended.

It has been demonstrated that appropriate prophylaxis is effective in the prevention of recurrent rheumatic fever.[1] However, it has also been demonstrated that parenteral benzathine penicillin G is more effective in the prevention of streptococcal infections and recurrence of rheumatic fever than either of the oral agents.[2] In the large series of Tompkins *et al*[3] it was shown during 10 years of follow-up that no patient on intramuscular benzathine penicillin developed evidence of a new murmur or mitral stenosis that was not previously present. In fact the murmur disappeared in 70% of the patients who were initially found to have a murmur of acute mitral insufficiency.

It appears, therefore, that oral therapy to prevent recurrences of rheumatic fever is risky in the light of the present knowledge regarding the natural history of rheumatic fever, the effectiveness of prophylactic therapy and the unreliability of patients.

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3. TOMPKINS DG, BOXERBAUM B, LIEBMAN J: Long-term prognosis of rheumatic fever patients receiving regular intramuscular benzathine penicillin. *Circulation* 45: 543, 1972

To the editor: I agree with Drs. van Nostrand and Tompkins that the evidence indicates the superiority of intramuscular benzathine penicillin G over oral penicillin in preventing recurrences of rheumatic fever and I thank them for emphasizing this point.

We urge that all patients with significant heart disease, all with poor living conditions and all suspected of poor compliance with the oral program be placed on intramuscular benzathine penicillin G. Some patients (and their parents) eventually refuse the intramuscular route and in our area most of the patients under the direct control of their pediatricians or family physicians end up receiving oral penicillin. The rheumatic fever committee of the American Heart Association has decided to accept this as inevitable by including the oral route in its recommendations (*Circulation* 43: 983, 1971), but the committee stresses the advantages of the intramuscular preparation.

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Side effects from lithium

To the editor: I read with interest the report by Ananth and Ruskin in *CMAJ* (111: 1049, 1974) of an unusual reaction to lithium. I would like to report the case of a patient recently under my care who also showed some unusual reactions while on lithium therapy.

In October 1974 a 37-year-old man was admitted to hospital with symptoms of manic-depressive psychosis, manic type. On admission he was self-assertive, elated and had pressure of speech. He was demanding and wanted his demands to be met at once. He had had his first breakdown in 1966 and since then had been hospitalized several times and treated with phenothiazines and electroconvulsive therapy but not with lithium. He had no history of minor or major seizures.

He was given chlorpromazine (Largactil), 100 mg *q6h*, methaqualone–diphenhydramine hydrochloride (Mandrax), 1 tablet (250 mg–25 mg) *q6h* and lithium carbonate, 300 mg *bid* on Oct. 15. When urinary retention developed the next day dosages of medications were reduced to: chlorpromazine, 25 mg *tid*, methaqualone-diphenhydramine HCl, 1 or 2 tablets at bedtime, and lithium carbonate, 300 mg *qid*.

He became more and more elated and irritable and was given ECT three times between Oct. 18 and 24.

On Oct. 26 he was somewhat withdrawn and much quieter. He complained of epigastric discomfort. At this time the serum lithium value was 0.46 meq/l (toxic value in our laboratory, 1.5 meq/l). All other laboratory values were within normal limits. His optic fundi, an electrocardiogram and a radiograph were normal.

On Oct. 28 he had several episodes of altered consciousness, when he complained of dizzy feelings and appeared to be listless, lethargic, bewildered and confused. He had several minor seizures that day and the next. An electroencephalogram recorded Oct. 29 was grossly and diffusely abnormal, with generalized dysrhythmia; the voltage was moderate and the wave pattern poorly defined, with random and diffuse theta-wave slowing and high-voltage sharp spikes. Hyperventilation testing could not be done and intermittent photic stimulation was without effect.

On Oct. 31 the lithium carbonate dosage was decreased to 300 mg *bid* and diazepam (Valium), 10 mg *bid* was added. The patient showed gradual improvement. Serum lithium value on Nov. 4 was 0.36 meq/l; estimations thereafter were also normal. An EEG recorded Nov. 7 showed no significant spikes or paroxysmal bursts and was only mildly abnormal. Diazepam was discontinued on Nov. 20 and the lithium carbonate dosage was increased to 300 mg *tid*.

At the time of discharge on Nov. 29 the patient was not psychotic, his mood was stable and he was free from seizures or episodes of altered consciousness. An EEG recorded that day was normal.

The mechanism (or mechanisms) of lithium's psychotropic action is still poorly understood. Lithium affects

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AVC Cream

Each tube contains:

Sulfanilamide 15.0%
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Allantoin 2.0%

with lactose, in a water-miscible base made from propylene glycol, stearic acid, diglycol stearate, and triethanolamine; buffered with lactic acid to an acid pH.

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ACTIONS—AVC is a vaginal preparation combining the complementary antimicrobial action of aminacrine hydrochloride and sulfanilamide. Bacteria, trichomonads, and *Candida*, alone or in combination, respond to AVC, even in the presence of organic matter.

Sulfanilamide, proved over many years, is highly effective against the pathogenic bacteria commonly associated with vaginitis; it is believed to block certain metabolic processes essential for the growth of micro-organisms of this type.

Aminacrine hydrochloride, a highly ionized acridine derivative, is an effective antimicrobial agent with minimal side effects. Its spectrum of bactericidal activity is wide and includes many Gram-positive and Gram-negative organisms, as well as trichomonads and fungi. Aminacrine hydrochloride is thought to act by interfering or competing with certain hydrogen ions in microbial enzyme systems; thus the growth of invading organisms is inhibited.

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INDICATIONS AND CLINICAL USE—For the treatment of vaginitis and cervicitis. Also for the prevention or control of infection following cauterization, conization, or other surgical procedures of the female genital tract.

CONTRAINDICATIONS—AVC should not be used in patients known to be sensitive to the sulfonamides.

PRECAUTIONS—As with all sulfonamides, the usual precautions apply. Patients should be observed for manifestations such as skin rash, or other evidence of systemic toxicity, and if these develop, the medication should be discontinued.

ADVERSE REACTIONS—Although some absorption of sulfanilamide may occur through the vaginal mucosa, systemic manifestations attributable to this drug are infrequent. Local sensitivity reactions such as increased discomfort or a burning sensation have occasionally been reported following the use of topical sulfonamides. Treatment should be discontinued if either local or systemic manifestations of sulfonamide toxicity or sensitivity occur.

DOSAGE AND ADMINISTRATION—1 applicatorful (about 6 g.) or 1 suppository intravaginally once or twice daily. Improvement will often be apparent within a few days, but treatment should be continued until pathogens have been eliminated or a clinical cure or remission is achieved.

Adequate control or eradication of *Candida* and trichomonads usually requires prolonged treatment. Exacerbation may occur during the menses; for such infections it is therefore advisable to continue the applications for a minimum of 1 month, or through 1 complete menstrual cycle.

Douching with a suitable solution may be recommended for hygienic purposes.

A pad may be used to protect underclothing if necessary.

DOSAGE FORMS

AVC Cream: 4 ounce tube with applicator
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STORAGE—Keep at room temperature. Avoid excessive heat.

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nerve excitation, synaptic transmission and neuronal metabolism. Alteration in ion transport or distribution or inhibition of adenyl cyclase may produce the effects seen in our patient.[1] Lithium carbonate may have caused the initial cerebral dysrhythmia with minor seizures that gradually improved as brain cells acquired tolerance to the lithium ion.

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Unwanted pregnancy and abortion

To the editor: I would like to comment on the articles concerning unwanted pregnancy and abortion in the November 16 issue of the Journal.

The medical and moral implications of abortion are matters of concern to the medical profession, and its responsibilities to the public cannot be evaded by attempts to pass them on to lawyers, philosophers or theologians. Any reasonable consideration of abortion cannot ignore a philosophy of life, and the fruitless struggle between the opposing groups of anti- and proabortionists must be avoided. The problem is polarized when it should not be.

A common error made by physicians is that they assume a responsibility that is not theirs. When a healthy woman becomes pregnant it is her responsibility and it is certainly not the duty of the physician to terminate the pregnancy. She can try to blackmail him with threats of suicide, of criminal abortion by incompetent people or of having an unwanted child. The medical profession does not resist these pressures sufficiently.

The influence of "lack of love" on the personality of a child is well known, but it is brutal and false to use this argument as reason for an abortion. Millions of children, wanted and unwanted, may be exposed to extreme lack of love and no one can predict who will be loved and who will not. It depends on a character trait of the mother. Abortion on the grounds of convenience, because the pregnancy does not fit into the living pattern that she has programmed, is an easy way out in a society where frustrations are overcome through denial or escape.

Another error is the view that pregnancy is the sole responsibility of the woman and that the decision to terminate it is therefore up to her. But a society's existence can only be maintained through pregnancies and therefore the pregnancy is also the responsibility of the father and of society at large. This is fundamental and laws are made for this reason.

Yet there are indications for therapeutic abortion. In outlining these one must distinguish between pregnancies that are normal and pregnancies that are pathologic.

Pathologic means that the process is a hazard to the health of the mother or the fetus (and this is not restricted to life hazard). Schizophrenia may be reactivated and puerperal psychosis may become worse with each delivery. Depression, however, as a clinical entity during pregnancy is extremely rare and there is no such diagnosis as a pregnancy depression. Yet the majority of indications for abortion are listed as depressions; the public knows this and abuses it. It does not require much skill to differentiate a true depression from sadness or grief resulting from a frustrating situation. If it is a depression one has to treat the depression, not the pregnancy. We are using the wrong diagnosis to escape from a difficult decision.

To justify an abortion one must be sure that health will be permanently damaged, as in a patient with chronic nephritis or one at risk of heart failure.

If the woman will be unable to rear the child, it can be adopted. If one is certain that a fetus will cause intrauterine damage one is justified to abort. If the infant at birth has a gross defect that is clearly pathologic I do not believe that one needs to prolong its life. I also do not see why a woman who is raped must carry a pregnancy that was enforced upon her in a pathologic act.

To me it is hardly disputable that the life of a human being begins at conception and that growth follows one continuous line from that conception to the development of a full personality. It is a completely arbitrary decision to establish a reference point at 3 months or later in pregnancy when the fetus acquires a human facial appearance, or at birth or at 1 year of age, in order to determine when one can abort or kill this life. For our growth and survival we remain dependent on our environment in varying degrees but not in any essentially different degrees. Each stage needs a specific environment or communication.

The lack of guiding principles has created a very disturbing situation. A most disturbing thought is that those who are unwanted can be disposed of. This happened to the Jews in Nazi Germany and it happens in all totalitarian states. In our free democracies it is forbidden to discriminate against any group on racial, religious or other grounds, yet we are on the road to