Correspondence

We will try to publish authors' responses in the same edition with readers' comments. Time constraints might prevent this in some cases. The problem is compounded in a bimonthly journal where continuity of comment and redress are difficult to achieve. When the redress appears 2 months after the comment, 4 months will have passed since the original article was published. Therefore, we would suggest to our readers that their correspondence about published papers be submitted as soon as possible after the article appears.

Juvenile Rheumatoid Arthritis

To the Editor: I read with interest and then concern Dr. Ronald W. Chapman's summary report on the diagnosis of juvenile rheumatoid arthritis (J Am Board Fam Pract 1995; 8:46-8). This concern has compelled me to comment on his guidelines for drug therapy for juvenile rheumatoid arthritis.

Recent controlled studies have shown that neither oral gold therapy nor therapy with penicillamine or antimalarials is any better than placebo in juvenile arthritis. Intramuscular gold therapy has not been tested in a controlled fashion, but it is not widely used anymore. Instead, methotrexate (10 to 15 mg/m^2/wk) has become the second-line agent most often used in children with severe disease who have not responded to nonsteroidal therapy.[1-3] Sulfasalazine is also used as a second-line drug in some children, although there are no controlled studies as yet. Methotrexate and sulfasalazine (40 to 60 mg/kg/d initial; 25 mg/kg/d maintenance) have been used to advantage during the last 5 to 8 years.[4] In our program at UMDNJ — Robert Wood Johnson Medical School, the intervention with methotrexate has been very promising and without untoward side effects in severe progressive disease, and its use is supported by corresponding literature. I personally have less experience with sulfasalazine, as in the 8 years of my participation in the program, it has not been used. Regarding the nonsteroidal agents, because of concerns about possible associated Reye syndrome, aspirin is no longer as widely used as it used to be; however, the following three orally administered nonsteroidal drugs have been approved by the Food and Drug Administration for use in children: tolmetin (25 mg/kg/d in a four times daily dosing schedule), naproxen (15 mg/kg/d in a twice a day dosing schedule), and ibuprofen (35 mg/kg/d in a twice a day or four times a day regimen).[4]

My purpose in writing is to convey briefly more current therapeutic modalities and, I hope, to assist the management of a severe disorder that is uncertain in prognosis. Patient care must be individualized as demanded by both the subset of juvenile rheumatoid arthritis and the most efficacious drug(s) with the fewest side effects utilized.

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Dr. Jane G. Schaller, a nationally recognized pediatric rheumatologist, assisted in the preparation of my commentary.

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3. Wallace C, Bleyer WA, Sherry DD, Salmanson KL, Wedgwood RJ. Toxicity and serum levels of methotrexate in children with juvenile rheumatoid arthritis. Arthritis Rheum 1989; 32:677-81.
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The above letter was referred to the author of the article in question, who offers the following reply:

To the Editor: I greatly appreciated Dr. Freis's interest in the case report on juvenile rheumatoid arthritis.

Salicylates and nonsteroidal anti-inflammatories (NSAIDs) remain first-line treatment for juvenile rheumatoid arthritis, but there are no studies to show that NSAIDs are more effective.[1,2] In discussions with local pediatricians and rheumatologists, salicylates remain widely used. There is also no evidence to support an increased incidence of Reye syndrome among juvenile rheumatoid arthritis patients receiving salicylates therapy; however, it is prudent to discontinue salicylates in a juvenile rheumatoid arthritis patient who has chickenpox or flu-like symptoms. Although the less frequent dosing intervals of some NSAIDs is an advantage, salicylate use offers the advantage of monitoring blood levels to avoid side effects. I appreciate the correction offered by Dr. Freis that naprosyn, ibuprofen, and tolmentin are approved for use by the Food and Drug Administration in juvenile rheumatoid arthritis.

In terms of the second-line treatment, I was unable to find studies that compared the choice of gold therapy with the choice of methotrexate therapy. A recent pediatric text does state that methotrexate is replacing injectable gold as second-line therapy.[3] The US-Russian collaborative study has certainly paved the way for more extensive use of methotrexate[4]; however, in discussions with local experts, there remains a great concern with the long-term side effects of methotrexate,

which have not been studied in children. Gold therapy has been used for decades in children without serious long-term side effects. Certainly the patient in my case report responded extremely well to gold therapy without side effects.

As is true for most of the diseases we treat, the therapeutic modalities for treating juvenile rheumatoid arthritis remain in evolution.

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References

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Fever in Infants and Children

To the Editor: It was with great interest that I read the article by Grubb, et al., "Management of Infants and Children 0–36 Months of Age with Fever without Source," published in the March-April 1995 issue of the *JABFP*.[1] Evaluation of children with fever without a source represents one of the most common and yet difficult clinical problems encountered by physicians caring for children. The search for a time- and cost-effective technique that will enable us to detect all children with a serious bacterial illness, but exclude the many more who do not, is akin to searching for the Holy Grail. Despite our efforts, there is not a tried and true method that will work for everyone.

Although the authors accomplished their critique of the guidelines published by Baraff, et al.,[2] they did not appear to be familiar with the vast pediatric literature devoted to the evaluation of the child with fever without a source. I have attempted to monitor this literature for more than a dozen years, and I would like to make the following comments:

1. Fever is defined as an elevation of body temperature above the normal range. That range varies according to the child's age, time of day (diurnal variation), and environmental factors, such as exposure to a radiant heat source. Although the expert panel defined fever as 38°C (100.4°F) rectally, a temperature of 39°C (102°F) is used for action steps. Teele, et al.'s classic study of 600 febrile children aged 4 weeks to 2 years old did not find any child with a rectal temperature of less than 38.9°C (102°F) who had bacteremia.[3]
2. Toxicity is certainly in the eyes of the beholder. The Acute Illness Observation Scale developed by McCarthy, et al.[4] is perhaps the best known scale used to quantitate the degree of illness (toxicity). The sensitivity of this scale for detecting serious illness when coupled with the history and physical is approximately 90 percent.[4,5] In younger infants aged 4 to 8 weeks, the sensitivity of this method decreased to less than 50 percent for detecting serious bacterial illness.[6]
3. Baskin, et al.[7] treated 503 febrile infants aged 28 to 89 days with intramuscular ceftriaxone following cultures of the blood, urine, and cerebrospinal fluid. All 27 infants with bacteremia had their infection eradicated or contained within 24 hours without sequelae. Jaffe, et al.[8] found that although the administration of oral amoxicillin reduced fever and improved the clinical appearance of children with bacteremia, it did not reduce the incidence of major infectious sequelae. In a randomized comparison with ceftriaxone, amoxicillin-potassium clavulanate produced more diarrhea and less clinical improvement during 24 hours, although both were believed to be effective methods of treatment.[9] At issue is when it is appropriate to use ceftriaxone. I believe it is inappropriate to use it in all nontoxic-appearing children aged 3 to 36 months with fever ≥39.0°C, because the vast majority will have viral infections. I therefore favor option 2 described by Baraff, et al.[2] in the care of febrile children aged 3 to 36 months.

I also agree that it is unacceptable to obtain blood cultures in all previously healthy children aged 3 to 36 months with temperatures 39°C or higher who do not appear toxic. Before the passage of the Clinical and Laboratory Improvement Amendment regulations, a screening finger-stick white cell count could be obtained and determined by hemocytometer in our office within 15 minutes. Because this test now qualifies as a complex procedure, few physicians are allowed to perform it. If the clinician thinks the child is sick enough to warrant a white cell count, a blood culture should probably be obtained at the same time.

Although I have not addressed all the issues raised by Grubb, et al., there are considerable data behind the clinical guidelines to support their rationale.

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References

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