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It's 5 pm Friday; the caller thinks he has strep— Do you write that script?

Before you decide, consider using this simple telephone scoring system

Should you treat a symptomatic patient by phone when his child has confirmed strep throat?¹ A recent Clinical Inquiry to *The Journal of Family Practice* posed this common question. The respondent answered by insisting on having the patient come into the office.

While we agree that a thorough examination is preferred over telephone management, we also believe that physicians need a strategy to apply when the adult patient cannot come to the office. Specifically, what do you do when the call comes in on a Friday evening, and the office is closed on Saturdays? What do you do when the patient is currently out of town? What do you do when the patient will not agree to an office visit?

Consider this tool for that late Friday call

If an adult patient caller has a son or daughter who currently has strep, the prior probability of strep causing the parent's sore throat increases dramatically. While we know of no studies that document this precise situation, we would estimate that the prior probability would increase to about 50%. (The authors of the Clinical Inquiry assumed a population prevalence of 10%.¹)

In such a situation, you may want to consider a tool that helps to estimate the probability of strep based on taking a history.² Using this scoring system, you would give a score of 0 to 3 (absent, mild, moderate, severe) for each of 3

TABLE

Should you write that prescription? Adult sore throat telephone scoring system helps you decide²

Add the scores for fever and difficulty swallowing. Then subtract the cough score. Consider writing a prescription for scores of +2 or greater.

VARIABLES	SEVERITY			
	ABSENT	MILD	MODERATE	SEVERE
Fever	0	+1	+2	+3
Difficulty in swallowing	0	+1	+2	+3
Cough	0	+1	+2	+3

symptoms—fever, difficulty swallowing, and cough. You would add the scores for difficulty swallowing and fever and then subtract the cough score. We recommend a score of +2 or greater as a reasonable cutoff for telephone management in this situation (sensitivity = 85%, specificity = 42%) (TABLE).²

This scoring system, while less well known than our examination based score,³ performed quite well. The ROC curve areas did not significantly differ from the areas of the scoring rule, which includes physical examination.

■ Unpublished data explain why this tool works

Sore throat patients cluster their signs and symptoms into 3 groupings: fever, viral symptoms (cough and coryza), and inflammatory signs and symptoms (exudates, adenopathy, and difficulty swallowing). Our unpublished data indicate that the severity of difficulty swallowing correlates with the severity of tonsillar exudates. Thus, the “telephone score” also correlates highly with the examination based score.

■ Keep in mind these 2 important caveats

If you recommend initial management for a sore throat patient, you (or someone on the nursing staff) should explain to the patient that if symptoms worsen, he should return for further evaluation. Even with antibiotic treatment, some patients develop peritonsillar abscess or Lemierre’s syndrome.

In addition, this telephone scoring tool is restricted to adult patients. Adult pharyngitis and pediatric pharyngitis, while similar, have significant differences. We developed the telephone score using adult data, and we have no assurance that it would work for children.

That said, we submit that family physicians should use this telephone score

Question: Why do we treat strep, anyway?

ANSWER:

- A) Prevent nonsuppurative complications.
- B) Prevent suppurative complications.
- C) Decrease the duration of symptoms.
- D) Prevent transmission to others.

A, B, C, and D are, of course, all reasons why we treat strep throat. The evidence in support of each of them, however, varies greatly. Consider the following:

- Of the **nonsuppurative complications**, we only have data that we can decrease the probability of rheumatic fever. Rheumatic fever in the US occurs rarely, and thus no longer has a major influence on our decision-making process. A recent review estimated the number needed to treat (NNT) for benefit as 3000 to 4000.⁴
- While we believe that early treatment decreases **suppurative complications**, there is no good data on the impact of early treatment on decreasing suppurative complications. The most recent estimate that we can find for NNT to prevent suppurative complications is 27.⁴ While uncommon, suppurative complications cause great pain, high health-care costs, and occasionally, death.
- Antibiotics clearly decrease **symptom duration** for strep throat.⁵ In the Zwart study, symptoms resolved 2 days sooner when patients were treated with penicillin for 7 days. Since patients call us because they feel bad, decreasing symptom duration is the most important reason to start narrow spectrum antibiotics promptly.
- We do not have great data on the **preventive benefit** to close contacts. We do know that strep infections have high infectivity.

FAST TRACK

Since patients call us because they feel bad, decreasing symptom duration is the most important reason to start antibiotics promptly

when an office visit is not feasible. We further suggest that you can use the telephone score to reassure patients that it's unlikely that they have strep throat. While we prefer seeing patients with sore throat, we need a rational strategy to apply to adults who cannot, or will not, come to the office. ■

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Disclosure

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