What is “Guarded Condition” Anyway?

I have yet to meet a physician or nurse who knew what the term “guarded condition” meant. I have met several intensive care unit personnel who have used the term, but they could not define it or tell me where the definition might be found. It commonly appears in news releases, particularly those describing the medical condition of some currently hospitalized famous person.

After questioning physicians in the two hospitals where I attend in the medical intensive care unit, the head nurses in both units, and selected intensivists around the country, I realized that this was not a medical term. Better results were obtained in finding definitions for the status of hospitalized patients when I directed my questions to the public relations departments of hospitals. Although public relations officers also did not know the definition of “guarded condition,” they did refer me to a Florida Hospital Association guide and an American Hospital Association general guide for the release of patient information by the hospital.

Since I was unaware of the definitions stated in these guides, it is likely that many other physicians are similarly unaware. Both guides are similar, so I will combine and summarize them here.

Condition reports:

Good—Vital signs stable and normal. Patient conscious and comfortable. Indicators are excellent.

Fair—Same as good, but patient is uncomfortable. Indicators are favorable.

Serious—Vital signs unstable and not normal. Patient is acutely ill. Indicators are questionable.

Critical—Vital signs unstable and not normal. Patient may not be conscious. Indicators unfavorable.

Further categories of “unconscious” and “dead” require no explanation. The reader will notice that there is no designation for “guarded condition” and no explanation of the meaning of the terms, indicators are “excellent,” “favorable,” “questionable,” or “unfavorable.”

It has been suggested to me that the term “guarded condition” might refer to prisoners who are surrounded by guards while hospitalized. Although this is technically correct, I doubt that this is the true definition of the term. I have concluded that “guarded condition” cannot be defined medically, and perhaps should not be used. It is possible that a reader of this journal has information unavailable to me and can correct my ignorance. If the information is useful to physicians, nurses, and therapists, I will be the first to pass it on in the pages of Chest.

A. Jay Block, M.D., F.C.C.P.
Gainesville, Florida

Perspectives on Methotrexate in the Treatment of Asthma

A growing body of literature has emphasized the role of airway inflammation in the pathophysiology of asthma. In an attempt to reduce the morbidity associated with long-term systemic steroid therapy in chronic asthma, investigators recently have examined the role for alternative anti-inflammatory medications. Coffey et al (Chest 1994; 105:117-21 [Jan]) provide the latest in a series of double-blind controlled studies examining low-dose methotrexate in the treatment of steroid-dependent asthma. When considered together, these studies yield inconsistent results and confusion as to the therapeutic value of methotrexate in asthma treatment.

Mullarkey and colleagues' were the first to report that methotrexate had a significant steroid-sparing effect in the treatment of steroid-dependent asthma. Two subsequent studies2,3 also provided evidence for variable but generally favorable steroid-sparing effects with methotrexate. Pulmonary function tests did not change with methotrexate and symptom scores were either unchanged or mildly improved. Side effects to methotrexate were minimal. Two other studies,4,5 as well as the study by Coffey et al, failed to show a significant steroid-sparing effect with methotrexate. Coffey et al and Erzurum and colleagues showed that steroids were reduced substantially and equally in both the placebo- and methotrexate-treatment groups. The authors in both reports attributed these results to implementing aggressive conventional therapies and close physician follow-up (every 1 to 2 weeks), although neither study was designed to specifically address the role of frequent follow-up in patient response.

The reasons for the inconsistent outcomes are not readily apparent. All of the studies were limited by
small numbers of patients and by relatively short study intervals. Nonetheless, longer intervals of follow-up in open trials have also yielded variable outcomes.\textsuperscript{4,6} Study design varied with some investigators using formal prestudy or initialization phases. Outcome, however, neither appeared to depend on whether the design was parallel or crossover nor on whether prestudy phases were used. Other factors may have influenced patient response, including variations in conventional therapy and patient compliance. Although all patients appeared to have had trials of more conventional "steroid-sparing" therapy, there was no uniformity between the studies as to the therapies and doses maintained throughout the study. Also, variable patient severity, airway inflammation, and nature of illness may influence patient response. Considerable interstudy variability existed among patients in their response to methotrexate. Factors such as degree of reversible airflow obstruction, duration of steroid-dependent asthma, extrinsic character of asthma, or other features may have influenced outcome in individual patients.

Despite the uncertainties raised by the differing outcomes in the above studies, pertinent observations can be made. First, adjunctive treatment with methotrexate may have a steroid-sparing effect in asthma, but beneficial therapeutic responses are not consistently seen. Second, the incidence of significant side effects with methotrexate therapy in asthma appears to be infrequent. The uncertain efficacy of methotrexate in patients with steroid-dependent asthma, however, should be weighed against reports suggesting a possible risk of infectious complications such as \textit{Pneumocystis carinii} pneumonia in patients taking both steroids and methotrexate\textsuperscript{5,7,8} and the rare but potentially severe hazard of occult cirrhosis with long-term methotrexate therapy.\textsuperscript{9}

The current standard of care for severe chronic asthma should remain the use of conventional therapies as recommended in a recent expert panel report.\textsuperscript{10} This care should include patient and family education, the use of daily patient diaries, regular peak flow monitoring, the development of a patient-provider partnership, and close follow-up to assess the patient's response to therapy and whether the desired outcomes are being achieved. The data now available indicate that methotrexate is not the panacea for steroid-dependent asthma. While methotrexate may be advantageous in select patients, there remains no substitute for frequent, careful, and attentive patient care.

\textit{Gary R. Cott, M.D.}

\textit{Denver}

\begin{thebibliography}{10}
\bibitem{3} Shiner RJ, Nunn AJ, Chung LF, Geddes DM. Randomized, double-blind, placebo-controlled trial of methotrexate in steroid-dependent asthma. Lancet 1990; 336:137-40
\bibitem{5} Trigg CJ, Davies RJ. Comparison of methotrexate 30 mg per week with placebo in chronic steroid-dependent asthma: a 12-week double-blind, cross-over study. Respir Med 1993; 87:211-16
\bibitem{7} Kutler LM, Harrison AC. \textit{Pneumocystis carinii} pneumonia as a complication of methotrexate treatment of asthma. Thorax 1991; 46:936-37
\bibitem{9} Gilbert SC, Kintmalm G, Menter A, Silverman A. Methotrexate-induced cirrhosis requiring liver transplantation in three patients with psoriasis: a word of caution in light of the expanding use of this "steroid-sparing" agent. Arch Intern Med 1990; 150:889-91
\bibitem{10} National Heart, Lung, and Blood Institute. Guidelines for the diagnosis and management of asthma. J Allergy Clin Immunol 1991; 88:425-34
\end{thebibliography}

\section*{Diagnosis of \textit{Pneumocystis carinii} Pneumonia

\subsection*{How Invasive?}

In the years preceding the current epidemic of HIV, \textit{Pneumocystis carinii} was a relatively rare clinical pathogen. \textit{Pneumocystis carinii} pneumonia (PCP) was, as it is now, an opportunistic infection which occurred in immunosuppressed patients. At that time, it was commonly accepted that PCP required an invasive procedure, usually open lung biopsy, for definitive diagnosis.\textsuperscript{1} This was in part based on the knowledge that, in patients dying of this infection, organisms appeared to be limited to the alveolar space and did not extend appreciably out of this compartment. Further, noninvasive procedures in sporadic cases failed to yield a diagnosis. Although not evaluated in a large series, sputum examination was consistently reported to be of no diagnostic value.

The HIV epidemic necessitated a re-evaluation of \textit{Pneumocystis} diagnosis. Clinicians discovered at the outset of the epidemic that open lung biopsy was