as is the renewed emphasis on one stop care for many common, uncomplicated, everyday patient care problems. There are dangers that some physicians trained to do only primary care will be tempted to go beyond what should be their limits, and there are dangers that family practice itself will become so enamored of family medicine that the essential grounding in traditional disciplines may be too greatly weakened to the detriment of quality in the care of sick patients. Very recently a major study by the Institute of Medicine of the National Academy of Sciences reminded us that it is the services and not the specialty that should form any definition of primary care, and spelled out the attributes that are essential to the practice of good primary care. This may help to develop a framework for discussing some of these problems and for answering some of the questions that need to be answered.

—MSMW

Hemoptysis 1977

DR. H. LYONS aptly stated recently, "The causes of hemoptysis vary in incidence from series to series and a number of factors influence the frequency in a particular report."[1] In this issue of the WESTERN JOURNAL, Drs. Wolfe and Simmons have expertly reviewed the causes and the factors related to hemoptysis. They also have discussed the management of hemoptysis, in particular the somewhat controversial topic of management of massive hemoptysis. In so doing they have compiled an excellent reference list 62 articles long. Their five tables actually serve as a fine outline for a clear and succinct approach to the problem.

In the 1970's several evolving trends concerning hemoptysis must be stressed, however. Certainly the true incidence of massive hemoptysis (arbitrarily defined as a rate of expectorated blood in ml per 24 hours—most authors use a minimum of 200 ml per 24 hours to define massive) has decreased. The better control of major lung infections causing massive hemoptysis (such as tuberculosis, active and arrested; bronchiectasis; lung abscesses, and necrotizing pneumonia) is the obvious explanation for this fortunate improvement. Specifically, at a busy city-county hospital of 350 beds and a large tuberculosis clinic, I cannot remember a single death due to massive hemoptysis from the aforementioned causes during the 6½ years I have been chief of the medical pulmonary services. This I must admit is probably an unusual, if not an atypical, experience, but still reflects the trends of the 1970's. During this same period we have worked closely with the thoracic surgery service and together have seen approximately two cases per year of massive hemoptysis requiring emergent aggressive thoracotomy and pulmonary resection. During this period I have also seen approximately four to five cases per year of frank hemoptysis (more than "streaking" but less than massive) in patients with a history of previously active tuberculosis. Unless the patients with this past history of tuberculosis and now current hemoptysis have some new active process (such as (1) reactivation of their tuberculosis—very rare, (2) actively infected cysts or residual cavities both by bacterial and aspergillosis—common, or (3) carcinoma—occasional), the hemoptysis was always of short duration and benign. This latter experience of hemoptysis in patients with arrested tuberculosis concurs strikingly with a larger published series by Stinghe.[2] He showed such patients' bleeding is from residual tuberculous bronchiectasis and also uniformly has a self-limited benign course.

The incidence of the two lung diseases, bronchitis and bronchial carcinoma, which usually cause nonmassive hemoptysis is increasing. In regard to this latter group of patients with nonmassive hemoptysis, the primary physician is often faced with the decision of recommending bronchoscopy or not. Since chronic bronchitis and bronchial carcinoma often coexist in the same population, there is no easy or single correct answer to this question. I strongly concur with Drs. Wolfe and Simmons' statement: "In many cases of nonmassive hemoptysis, the cause is obvious and bronchoscopy is not necessary." Several clinical guidelines are helpful, however, in this group where the hemoptysis is usually "streaking of sputum." If the patient is less than 35 years old or is a nonsmoker, the likelihood of primary bronchial cancer is rare. In addition, in the great majority of bronchitic patients findings on radiographs of the chest are normal (excluding hyperinflation and mild increased markings), while in most patients with bronchial cancer with hemoptysis there are abnormal findings on films (mass, infiltrate, atelectasis and the like). Also it is important to remember that blood streaking of sputum secondarily to an acute bronchitis or an exacerbation of chronic bronchitis usually lasts only a day or two, while persistence or recurrence of such blood-streaked sputum or cough is much

more ominous and will require early bronchoscopy.

Putting the use of the 1970's instrument, the bronchofiberscope, into perspective in regard to hemoptysis is necessary. Most 1970's articles on hemoptysis dwell on the use of this fine instrument. In my opinion no bronchoscopy, especially for blood streaking and frank but nonmassive hemoptysis, is complete or adequate without the use of the bronchofiberscope. The diagnostic yield will be improved and the risks are acceptable if the examination is done as soon as possible after the beginning of the hemoptysis requiring bronchoscopy. None the less, this instrument does not replace good clinical judgment and is probably overused for many reasons including monetary considerations. In cases of massive hemoptysis the use of a rigid bronchoscope for emergency examination seems more advantageous than using a bronchofiberscope. The selection of which scope to use for hemoptysis seems less important, however, than the close active communication and cooperation between the experienced pulmonary physician and the skilled thoracic surgeon.

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We Have Come a Long Way

THE HISTORICAL PIECE by Ilza Veith which appears elsewhere in this issue serves as a good reminder of how far medicine in the West, and indeed in the Western world, has come in the last 100 years. In one sense 100 years seems a long time, but compared with today's human life expectancy of more than 70 years, it really is not. It is safe to say that change in medicine has been at least as dramatic as change in the little town of Tiburon, California, since the 1870's, and it could even be that there has been relatively more "progress" in medicine—a statement that today's real estate entrepreneurs in that part of California might conceivably wish to challenge. We have surely come a long way in a mere century and the mind boggles at what medicine will be able to do 100 years hence in the 2070's. Tiburon will seem to have hardly progressed at all by comparison. And it is sobering to realize that some who are being born today will live to see and experience these changes which are inevitable but yet to come. —MSMW

Acute Renal Failure

ACUTE RENAL FAILURE, discussed by Dr. Mendoza elsewhere in this issue, has changed over the last decade.[1,2] The causes are more readily ascertained; the treatment has attained the status of conventional, and the prospects for those children who sustain irreversible damage are better. The decline in the prevalence of poststreptococcal glomerulonephritis has been very noticeable in the Northern and Western United States where scarlet fever and streptococcal pharyngitis were the common infections antecedent to the nephritis. In Hawaii and the southeastern part of the United States where the climate is warm and humid, the disease is prevalent and its antecedent infection is impetigo.[3] The seasonal incidence and immunologic responses differ depending on whether pharyngitis or skin infection is the antecedent. In other respects the disease is the same. Better housing and nutrition, more effective use of antibiotics or the natural history of the disease may account for the decline in streptococcal pharyngitis and the associated decrease in nephritis induced in this way. The good prognosis customarily associated with nephritis affecting children appears to continue.[4,5]

The hemolytic-uremic syndrome, described in detail by Dr. Mendoza, is enigmatic. It appears to be a modern disease not present to any degree two or three decades ago. It is more prevalent in Argentina, South Africa and the Western United States. Its cause remains obscure. Our experience has been that the disease may leave the kidney severely injured more often than the experiences cited by Dr. Mendoza.[6] The children who suffer permanent damage are among those who are severely oliguric or anuric on admission. However prolonged, oliguria, even to six weeks, is compatible with complete recovery.

Acute tubular necrosis as noted often is preventable. The tendency, common a decade ago, to have children referred who had been given excessive quantities of 5 percent glucose and 0.2 percent saline solution (the ward all-purpose solution) to the point where they had hyponatremia, has fortunately reversed.

Giving isotonic sodium chloride, Ringers lac-