missions. Along with directing the application of diagnostic and therapeutic facilities in a "cost-effective" manner, they must look to their own imposition of cost burden on the system.

Because there is reason and logic on the side of those who thus speak publicly, the true primary mission of the physician has disappeared from the discussion, and thus, from view. That mission is the welfare of the patient with whom I am dealing right now. All considerations other than this are secondary according to everything that has been written about medical ethics from pre-Hypocratic times to the tracts of the Talmud, Old and New Testaments, Koran, and including the writings of philosophers and theologians up to the present. Thus, any discussion of cost effectiveness or allied subjects must be couched in terms that make absolutely clear that the physician has his priorities and must hold to them slavishly. Any retreat from such principles, no matter how small, opens the door for terrible distortions and exploitation of the sacred and trusted role of the physician in society.

I am told that cost-effective medicine is good medicine since it also conserves the patients' resources. I might have been more impressed had I been told that it saves the patient's resources! Again, the implication that my concern is for the patient in front of me and not for all the patients whom I shall see in the future.

First, the point about cost-effective medicine being good medicine . . . it may be, but not necessarily. Take the matter of diagnosing a lung tumor. I am told that it is cost-effective to do the bronchoscopic procedure directly and not to bother with the cytologic examination on three specimens of sputum beforehand. Perhaps the likelihood of making a diagnosis is greater with the endoscopic procedure, but there is a slight risk to the procedure which does not exist when sputum is sent for cytologic study. So cost-effectiveness notwithstanding, I chose to do the safer examination first!

Now as to the second point: the specific patient with whom I am dealing vs the patients, and the public, taken as a group. I submit that the responsibilities to the larger group are often based on assumptions which may be highly likely from a statistical point of view. For dealing with impersonal groups and situations, this is now lege artis, but any single individual may represent the exception and the physician's role is to try to recognize the exceptional individual and modify the general assumption so as to avoid trouble. This dilemma is the daily diet of patient-care doctors and imposes one of modern medicine's most difficult responsibilities on each one of us. Therefore, the primary mission in life for the doctor is to do what is best for the patient he is dealing with right now!

In light of this, I suggest to the planners, economists, administrators, policy makers, that the example of defense budgeting should have created a precedent for medical spending. Both cost more than they did 30 years ago because the content of both has changed. Hopefully, we are achieving more in medicine than we did 30 years ago, but even that is not the point. The point is that we are trying to improve our product, and if the public wants those efforts to continue, then the public must pay.

Any attempt to cut waste and inefficiency is to be applauded. In some settings, these attempts can be more efficient than in others. The efficiency of activities centered around and for human beings tends to be less efficient than activities centered around inanimate objects. Thus, we must all continue to maintain efficiency in medicine and medical care, but at all times the humanism and humaneness of our activities must have a major impact and be the primary consideration.

I would like to think that the physician's role as an ethical professional is not in question among physicians themselves or among the allied professionals with whom physicians work on these great objectives of ours. But in the end, the most important matter for me is that I convince my patient that I have his best interest at heart and then—the hard part—I must convince myself each time I start dealing with another patient.

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Endodermal Sinus Tumors

The endodermal sinus tumor (EST) is a rare tumor in its pure form, representing only a small fraction of adult germinal tumors. Although a rare histologic subtype among adult males, it is frequently encountered in ovarian germ cell tumors and is the most common germinal tumor of infants. The endodermal sinus tumor was initially described by Teilum' in his comparative anatomic studies documenting the resemblance of the ovarian endodermal sinus tumor to the vitelline structures of early embryogenesis. This tumor has carried many labels including the yolk sac tumor, vitelline tumor, polycembryoma, and infantile adenocarcinoma.

EST has a distinct biologic behavior and pathologic appearance and is an obligate secretor of alpha fetoprotein but not a secretor of βHCG. The characteristic pathologic findings are: a reticular pattern with flat lining malignant epithelial cells; the presence of PAS-positive globules which contain alpha fetoprotein, alpha, antitrypsin, and ferritin; and the characteristic,
but not diagnostic, Schiller Duvall bodies. Pure EST has been recognized in the anterior mediastinum of adults, the ovary, and in the testis of infants. It has recently been reported to occur frequently as a component of a mixed germ-cell tumor in the adult testis.

Experience with EST of the mediastinum is small and was included among non-seminomatous tumors of the mediastinum in previous reports. Local modalities are ineffective. Despite aggressive surgery and radiation, a universally fatal outcome can be expected.\(^2\) Chemotherapy with platinum-velban-bleomycin (PVB) also appears to be ineffective in eradicating anterior mediastinal EST. Kuzur et al\(^3\) have claimed patients with anterior mediastinal EST are resistant to PVB and should be referred for experimental chemotherapy. Hainsworth et al\(^4\) have excluded patients with mediastinal EST from analysis of PVB results.

As pointed out in this issue of Chest (see page 64), salvage of patients with mediastinal EST can be achieved with conventionally available agents. Correct treatment of patients with EST requires that the patient be recognized as harboring a unique tumor with clinical characteristics requiring aggressive combination chemotherapy and possible surgery.

The role of surgery following chemotherapy for patients with advanced germinal tumors, in most instances, is not therapeutic but rather offers the opportunity for evaluation of the characteristic residual masses following effective treatment. The dominant locally invasive properties of EST manifested by the frequent presentation with the superior vena cava syndrome and symptoms of local tumor invasion suggest that therapeutic benefit of local modalities may exist when combined with chemotherapy. With the use of CISCA\(_w\)/VBr combination chemotherapy, three of four patients presenting with massive anterior mediastinal EST appear cured.\(^5\) One of the patients in complete remission required surgical resection for a persistently, but modestly, elevated alpha fetoprotein and at surgery a small focus of endodermal sinus tumor was encountered. The patient did not require post-operative chemotherapy and he remains alive and free of disease for greater than two years following his last treatment. This patient and the patients treated by Vogelzang et al suggest that, in addition to more aggressive chemotherapy, surgical intervention following chemotherapy may prove therapeutic in select patients.

Surgery among patients who have received chemotherapy for persistent radiographic masses requires the services of experienced thoracic surgeons in the management of these tumors. The philosophy of such an operation, in the absence of an elevated serum biomarker, should be to verify the presence or absence of persistent viable disease and remove large volume teratoma. Therefore, high-risk surgery among patients with tumors encasing the major vessels is contraindicated in this setting. A contrary approach should be adopted for those patients with expanding masses, or with a persistent alpha fetoprotein elevation. In such a case an extensive resection with wide surgical margin may result in salvage.

With so few patients in the CEBA regimen, and our own experience with CISCA\(_w\)/VBBr cyclic chemotherapy relatively small, it is difficult to compare the relative merits of these regimens. The superiority of CISCA\(_w\)/VBBr or CEBA to conventional PVB chemotherapy, where one would expect a universally fatal outcome, is clear.

In the treatment of unusual tumors that require an aggressive multidisciplinary approach, a major determinant of patient survival will be the experience of the clinician. Aggressive chemotherapy with conventionally available cytotoxic agents and the appropriate use of surgical intervention can result in cure of patients with EST. Patients with mediastinal EST should be referred to major centers for their management.

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References