New Insights and Gains in Pancreatic Cancer

The recent untimely death of Gene Upshaw, formerly of the Oakland Raiders and head of the NFL Players Union, from pancreas cancer has brought this difficult disease to the forefront of public attention. Even among physicians, this particular cancer immediately evokes the sense that survival will be short and particularly painful and morbid. The apparent brief duration of Mr Upshaw’s course does nothing but reinforce this generally held sense of gloom and doom that in many instances results in patients receiving less than optimal clinical care. In reality, however, the picture should be viewed in a different light.

Only 50 years ago, a diagnosis of any cancer was associated with a similar sense of fear and dread due in large part to the mystery of the “crab” pursuing its lethal course in an unknown and uncontrollable fashion. Patients and families were isolated, and patients with advanced disease were largely shunned and avoided by the medical profession. Once many of the unknowns about cancer were eliminated, it became evident that it was just a disease like many others — a disease that had known causes, could be prevented and diagnosed early, had a predictable biology and pattern of spread, and could be treated logically and effectively using a variety of approaches. I believe that we are approaching these important clarifications with cancer of the pancreas, and I hope the articles in this issue of Cancer Control will underscore the impressive gains in knowledge and understanding of this particular cancer over the last decade. Risk factors have been identified, precancerous lesions have been described, diagnosis has improved, and treatments are being actively studied. This is no longer a “forgotten” cancer.

Leading off the issue is an article authored by Dr Klapman and I that provides a discussion of the potential of screening for pancreatic cancer. One might assume that this disease is not sufficiently prevalent in the population to justify such an approach, but endoscopic ultrasound appears to be an effective test that can identify preneoplastic lesions. The key to success will be identifying patients with a sufficiently high risk to apply the intervention. The association of pancreatic cancer with smoking and long-standing diabetes has long been known, but the inclusion of patients with several genetic abnormalities will be required. But think of it — preventing and diagnosing pancreas cancer at an early stage!

From the days of Whipple, surgical resection of clinically localized pancreatic cancer has been a standard of care. However, many still consider this type of intervention to be meddlesome and ineffective, particularly since the early outcomes were poor, with high operative morbidity and mortality rates. Dr Helm and colleagues studied a group of patients treated with pancreatectomy for ductal adenocarcinoma over the past 20 years at a single institution. The morbidity and mortality rates have dropped significantly, and the results indicate that some patients will do well, reinforcing the sense that such surgical resections offer a real chance of long-term survival. This article also discusses the controversies surrounding how survival results should be reported — a key factor when comparing results and outcomes from different studies.

Controversy exists regarding optimal management of patients who have had resection of pancreatic cancer but in whom the resection margins are found to be involved by tumor. Drs Springett and Hoffe present and review the value of neoadjuvant treatment programs employing gemcitabine chemotherapy followed by chemoradiation to increase the possibility of subsequent margin-negative resection. Additional work is needed in this area, but progress clearly is being made.

Currently, there is enormous interest and activity in developing new agents and approaches to treat patients with unresectable and metastatic pancreatic cancer. Gemcitabine has been identified as the most effective drug presently available. Dr Cartwright and colleagues review the status of research in this area, with an emphasis on the studies performed by the US Oncology Research Network that has evaluated many new drugs and combinations as well as targeted approaches. While the disease remains resistant to most currently available interventions, the burgeoning progress in developing specific targets for novel interventions suggests that more effective treatment may not be too far around the corner.

One type of metastatic pancreatic cancer that requires different approaches to management is exemplified by pancreatic neuroendocrine tumors. Intra-abdominal metastases frequently involve the liver, can be huge, and are often symptomatic from both their bulk and their secretions. While various systemic approaches and interventions can provide appreciable benefits, progression inevitably occurs. Dr Hodul and colleagues provide convincing evidence that, in appropriately selected patients, cytoreductive surgery can provide appreciable benefit in palliating symptoms and lengthening survival. They provide guidelines for selection of suitable patients, but it seems clear that such approaches are best
planned and executed in centers where the necessary expertise and experience are available.

Implicit in all these presentations is the concept that an interdisciplinary approach to pancreatic cancer is key to optimal study and outcomes — how best to diagnose, stage, treat, and support individual patients with the disease. To conclude this compilation of reviews of several aspects of pancreatic cancer, we include a summary of a face-to-face discussion among multiple specialists concerning a specific patient’s problem. This “tumor board” concerns intraductal papillary mucinous neoplasm of the pancreas, but the example can and should be applied to newly presenting patients with all stages and varieties of the disease. In my extensive experience of managing patients with pancreatic cancer, I am constantly surprised and educated by the new information and alternate approaches that tend to appear when diverse specialists address the same problem. Thus clinical progress is made.

This issue of Cancer Control also includes our regular Cancer, Culture and Literacy feature. Dr Katz and associates report on two studies that are highly pertinent to maximizing participation in effective cancer screening activities. One is related historically to the lamentable “Tuskegee Project” in which African Americans were harmed and untreated to observe the “natural history” of syphilis. Clearly, the consequences of this immoral “study” remain today. Blacks and Hispanics self-report that minorities, compared with whites, are more likely to be “taken advantage of” and are less likely to get a “thorough and careful examination” in a cancer screening. Another study by Dr Katz and colleagues notes that, despite these reservations, blacks and Hispanics also self-report that they are either as willing or more willing than whites to participate in screening programs (with the exception of skin cancer, for which blacks have a lower risk).

The final article in the issue is a special report concerning a rare tumor — extradural schwannoma arising from the sympathetic chain. Although these tumors are difficult to diagnose and are usually benign, Dr Jain and coworkers feel that surgical resection should be considered rather than “watchful waiting.”

We hope you will enjoy and benefit from reading the articles in this issue. Progress is being made on a variety of fronts, and patient outcomes are bound to improve as a result.

Mokenge P. Malafa, MD
Chair, Department of Gastrointestinal Oncology
Program Leader, Gastrointestinal Tumor Program
Head, Section of Hepatopancreatobiliary Oncology
Surgical Oncologist
H. Lee Moffitt Cancer Center & Research Institute
Tampa, Florida
E-mail: mokenge.malafa@moffitt.org