Always enjoy Annual Scientific Meetings. I find them to be a good opportunity to catch up on progress in oncology and to network with old friends and colleagues. In this article I will summarize some of the highlights from two of last year’s meetings: the American Society of Clinical Oncology (ASCO) and the American Urological Association (AUA).

It is worth reviewing briefly the general state of the art prior to this meeting. Important progress has been made in the past five years. There is an increasing recognition that unfocused prostate screening is neither cost-effective nor always beneficial. Of equal importance, there is an increased focus on early and aggressive prostate cancer in high-risk populations—men with a family history and African American men.

The investigation of the human genome has identified a battery of genes that are now being studied as possible predictors of prostate cancer. This may ultimately allow us to identify those patients who really do need early treatment. There is a continuing attempt among prostate researchers to try to find more reliable clinical predictors of treatment results. One of the most promising options may be measuring the rate and duration of reduction of PSA after treatment. More speculative, but analogous to a previous study in patients with breast cancer (Cristanofilli et al, NEJM, 2004), we are conducting a trial to assess the utility of measuring circulating tumor cells after chemotherapy. In that study one of the most powerful predictors of long-term survival was the clearing of circulating tumor cells after chemotherapy.

There were several major themes in genitourinary oncology at this ASCO meeting:

Reassessment of untreated PSA-only prostate cancer—Matthew Smith et al followed patients with PSA-only hormone refractory prostate cancer and showed that, at 2 years, only 33% had developed bone metastases. This indicated a more indolent pattern of progression than anticipated. By contrast, Michael Kattan et al found...
The American Cancer Society recently reported that the estimated cancer deaths for 2006 will be lower than the projected totals for 2005, which is the first decline in actual deaths in over 70 years. While this is unquestionably good news, it masks the facts that the decline is not universal and equitable across our society. The number of Black men who die from prostate cancer is still twice that of Caucasian; though the incidence of breast cancer is lower among Black women versus white women, the mortality and five year survival rates are greater; several studies continue to confirm that the most significant factor in cancer incidence is poverty.

Implicit in these conclusions is the importance of prevention and screening in impacting on the negatives affecting those most at risk. For those who rely on hospital emergency rooms as their primary care physician network, programs of health awareness, disease prevention and free screening are critical to extending the hope for true decline across all consumer sectors. Disparity is not just a racial issue, but a National imperative to change the status quo. Standard of care must be equal and accessible regardless of race, gender, ethnicity, geography and/or socio-economic status.

In this issue we’re going to look at Advanced Stage Disease, relative to prostate and other cancers. As we try to quantify and qualify various approaches in managing the disease, we need to also focus on the fact that it is more than just one disease state: there’s the patient who fails primary therapy, the disease recurs and then progresses; and then there’s the individual for whom the primary diagnosis is at an advanced stage. Each situation mandates a separate effort in education and intervention at all levels of consumer and professional interaction.

But more importantly than the treatment of advanced stage disease is the process wherein the protocols are developed that produce the therapies. A recent article in Fortune magazine by Clifton Leaf, the Senior Editor and himself a cancer survivor, (http://money.cnn.com/magazines/fortune/fortune_archive/2006/02/20/8369155/index.htm) lays out several examples of problems facing patients, professionals and the pharmaceutical companies. At the core of the problem is the time it takes to bring a drug to market, the procedures that must be followed which limits availability to patients who might benefit from the drug as well as the lack of greater consumer/patient/survivor participation in the process.

We must go past our assumptions relative to consumer health literacy, community access to care and patient willingness to assume risk for a chance at survival. We need to become more transparent in our programs and more open in communicating with all stakeholders in the problem. We need to extend our outreach past the traditional channels and embrace participation in our processes by all those from whom we expect to benefit.

Disparity is just a word for which we have the power to re-define.
that 90% of untreated patients in the U.K. either required systemic treatment or died (either from prostate cancer or other causes) within 12 years. This reinforces that it is critical to consider the age of a man newly diagnosed with prostate cancer and whether he has any other life-threatening diseases when planning a treatment approach.

Predictors of treatment outcomes—PSA doubling time and/or Gleason scores were repeatedly shown to be important prognostic determinants for patients with metastatic disease, but there is still controversy regarding long-term response. For example, D Amico et al and Petylak et al have shown that PSA response duration is a useful measure of outcome, but Roessner et al showed that the beneficial effect of treatment of hormone refractory prostate cancer is only partially explained by the duration of PSA response.

Novel compounds—It has now formally been shown that docetaxel is active as second line treatment in patients with hormone-refractory prostate cancer that have already received mitoxantrone. Saad et al and Oh et al found that docetaxel produced pain and PSA responses in more than 50% of the cases. It also appeared that the sequence of docetaxel to mitoxantrone was superior to mitoxantrone to docetaxel (Michaels et al).

Editor's Note: you can search the Virtual Meeting of this conference to see all presentations and posters at:
http://www.asco.org/portal/site/ASCO/menuitem.64cfbd0f85eb37b2eda2be0aee37a01d/?vgnextoid=09f8201eb61a6701030cm100002730ad1RCRD&vmview=vm_track_sessions_view&index=y&confID=34&trackID=3

AUA 2005

A heavy emphasis on prostate cancer was placed at the Annual Scientific Meeting of the AUA in May, 2005. For example, Peter Albertson et al demonstrated that significant reclassification has occurred in the past decade. Pathologists currently attribute higher Gleason scores to biopsies than they did in routine reporting 10 years ago. This could have caused an apparent, but not actual, improvement in outcomes over that period.

A multi-national European study compared immediate vs. deferred castration in patients with asymptomatic advanced prostate cancer. Urs Studer et al found no reduction in prostate-related deaths in patients receiving immediate treatment, but they did find the overall survival rate was improved by 11% at 10 years in that same group.

Finally, a study from Stanford University by Lee et al found that family history of prostate cancer was not a determinant of worse survival rates. Men with localized prostate cancer and a positive family history were more likely to have less aggressive cancers than their counterparts without a family history.

Editor's Note: highlights of this conference can be seen at:

IN SUMMARY

The past year has seen a focus on studies of biology, work to define prognostic factors more clearly, attempts to study the usefulness of prostate screening, and isolating factors that may allow selection of populations of men who merit special screening attention. Considerable work is still in progress on the management of advanced and hormone refractory disease. Hopefully 2006 will see the major breakthroughs that 2005 was lacking.

ASCO 2006 Prostate Cancer Symposium

Following on Dr. Raghavan's comments, this conference did focus on the many new approaches to treating advanced stage disease in its multiple forms. However, a significant portion of the agenda concentrated on prevention and screening as well as early, localized disease. The debate on the necessity and/or appropriate use of screening programs continued with champions on both sides of the issue and no immediate resolution to aid patient informed decision-making in site.

Several of the major presentations are highlighted in this issue and specific review of all the presentations and posters can be seen at:
http://www.asco.org/portal/site/ASCO/menuitem.64cfbd0f85eb37b2eda2be0aee37a01d/?vgnextoid=09f8201eb61a6701030cm100002730ad1RCRD&vmview=vm_track_sessions_view&confID=42&trackID=1&sortBy=SP

Financial News Highlights

Celera Genomics reported an improvement in 2nd Quarter results and significant progress in their research portfolio of proteomics and genomics platforms. The company stated that they have validated 38 cancer targets and another 124 targets have been selected for validation studies. The targets include pancreatic, colon, breast, lung, gastric and prostate cancers. The stock trades on the NYSE under the symbol CRA.

Alkermes has been given an outperform rating by FBR Equity Research based on its partnership with Johnson & Johnson and Cephalon in marketing several drugs for antipsychotic and diabetic conditions. The stock trades on the NASDAQ under the symbol ALKS.

Novartis reported gains in sales, operating income and market share on the strength of their product portfolios in Cardiovascular and Oncology Pharmaceuticals as well as Consumer Health and Sandoz. The company has increased the proposed dividend for 2005 by 10%. US shares of the company trade on the NYSE under the symbol NVS.

Dendreon, manufacturers of the immunotherapy vaccine, Provenge, laid off 34 employees and reassigned several senior executives to focus company efforts on gaining Federal drug approval and marketing. If approved by the FDA, it would be the first vaccine to work in the treatment of prostate cancer. The company raised $48 million in December to provide capital support for the company and the drug over the next 18-24 months. Details of the Seattle Post-Intelligencer article can be seen at: http://seattlepi.nwsource.com/busines/256535_dendreon21.html

The company's stock trades on the NASDAQ under the symbol DNDN.

Sanofi-Aventis lost a case in U.S. courts, along with their partner QLT of Canada, after being sued by TAP Pharmaceuticals which alleged that the drug Eligard infringed on one of the TAP patents. Sanofi-Aventis is appealing the ruling: the company's stock was down slightly on the news.
Trasylol, (chemical name — aprotinin) a drug used to reduce blood loss in patients undergoing heart-bypass surgery, has been found to cause serious side effects as reported in an article in the New England Journal of Medicine. A study done by researchers at the Multicenter Study of Perioperative Ischemia Research Group and the Ischemia Research and Education Foundation found increased incidence of required kidney dialysis, myocardial infarction and heart failure among the patient population analyzed. Details can be seen at: http://content.nejm.org/cgi/content/short/354/4/333

In another article from the New England Journal of Medicine - http://content.nejm.org/cgi/content/short/354/4/353 - research showed that African-American and Native Hawaiian smokers were more likely to develop lung cancer than whites, Japanese-Americans and Latinos. While seemingly critical, dissenting editorial opinion suggested that eliminating smoking would largely reduce and equalize the rates of lung cancer across all groups.

The U.S. Food and Drug Administration voted to recommend the return of the multiple sclerosis drug, Tysabri, to market. Biogen Idec and Elan had previously voluntarily removed the drug after some studies showed a link to a rare brain disorder. Final decision by the FDA is expected by the end of March. Details can be viewed at: http://www.bloomberg.com/apps/news?pid=10000102&sid=ay7hhP7I...&refer=uk

GTx reported that it has enrolled over 1,300 patients in a Phase III trial of its drug Acapodene for the treatment of side effects of androgen deprivation therapy (ADT). Additional drugs, Ostarine and Andarine are also in development to address the effects of wasting resulting from chemotherapy treatment. Additional information can be seen at: http://www.gtxic.com/tech/pipe line.htm

Board Members | Michael & Kelly Gottlieb

Like all of the members of the Prostate Net team, Michael & Kelly Gottlieb are involved in many worthy causes in addition to their work with The Prostate Net. Michael, former CEO of a global textile company, has been a member of The Prostate Net Board almost since its inception and has been instrumental in guiding the organization as it grows and expands. He is involved in numerous volunteer projects in his community and is the zoning commissioner for their hometown in Florida. His wife, Kelly, is also a town commissioner and a pilot with over 28 years of commercial and private experience.

Kelly, who has an Air Transport Pilot’s license, was the Chief Pilot for Michael’s air transport group, moving executives around the U.S. Now she volunteers her flying time for various organizations like Lighthawk (www.lighthawk.org), a volunteer-based environmental aviation organization. She and Michael, a serious amateur photographer, have done fly-overs together to monitor and record Off-Road Vehicle damage in Florida’s National Forests. She is also affiliated with the Angel Flight program (www.angelflight.org), a national non-profit group that provides air transportation at no cost for needy patients who must travel long distances for specialized medical evaluation, diagnosis, treatment, or rehabilitation.

In the aftermath of Hurricane Katrina, Kelly’s skills as a pilot and a humanitarian were called on once again. She teamed with Hands On USA (www.handsonusa.org) and flew two missions into the Gulfport area carrying almost 1000 pounds of supplies. These supplies were distributed to areas often ignored by the media that were in desperate need of help. The purpose of the trips was to support the people, police and firefighters, whose own homes and families were also shattered. In Kelly’s words, The pictures on TV did not do justice to the devastation in the area. I will never forget the tears in the eyes of the police sergeant who came to unload my plane. His home was uninhabitable because of damage, yet he is out protecting and helping others. We needed help.

We are proud to have Michael and Kelly Gottlieb as part of The Prostate Net team. Their skills and passion individually and together inspire us all.

"In The Know" Multi-Copy Distribution

We have received several requests from patient support groups, community service agencies, barbershops, medical centers and doctors’ offices for multiple copies of this newsletter to distribute to their clients or constituents.

If you need more than one copy of each edition of "In The Know", please advise us and we will provide the quantity needed. Send your name, organization name, postal address and email to: virgil@prostatenet.org

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**Medical News Highlights**

The Prostate Net/Knowledge Net works to empower our audience through education that leads to informed action. Much of our strength comes from the committed Board of Directors Members who guide our vision. The following is the second in a series of articles that focus on these individuals and the good that they do.

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**BOARD MEMBERS SPOTLIGHT**
Dr. Eric Klein of the Glickman Urologic Institute at the Cleveland Clinic and the research team from the University of California, San Francisco, announced a surprising finding at the ASCO Prostate Cancer Symposium last month: they discovered a new virus in patients with a rare form of prostate cancer. The virus, named XMRV, is closely related to a microbe that is known to cause cancer in mice. It was found in a small group of men with both prostate cancer and a genetic mutation—they are missing the genes that help cells fight off viruses. Only 13% of men have this mutation. The virus was found 25 times more often in this group than in men without that mutation.

Although there are other cancers known to be caused by viruses—cervical cancer is caused by the human papilloma virus, also responsible for genital warts, and hepatitis B greatly increases the risk of liver cancer—this is the first virus linked to prostate cancer. Strangely, XMRV is not found in cancerous prostate cells; it resides in the tissue surrounding the prostate known as stroma, but only in 1% of the stroma cells. The team is now working on the following questions:

1. What percentage of men have the virus?
2. Are there any links between the virus and sexual activity?
3. Is personal and family medical history a factor?
4. Does it cause prostate cancer or any other disease?

Finding the virus is significant even though it was found in only a small percentage of prostate tumors. Blood tests are being developed to detect antibodies, showing that someone had been exposed to it. It is possible that many people might be infected with the virus, but it may only reside in those who lack the enzyme to fight it. That infection might be a cause of the chronic inflammation that is suspected to cause prostate cancer. New drugs and vaccines could be developed to treat the virus.

There are many more mysteries to solve about XMRV. 

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DR. DAVID AGUS

Chemotherapy In Practice

by Diane Johnson

In prostate cancer, the staging of the disease is as urgent as the diagnosis. A finding of Gleason 7 or higher means there is a greater chance that the disease has spread beyond the prostate. In this case, chemotherapy may be used, either as a second line of treatment, or, in some cases, the primary therapy.

Dr. David Agus, Research Director of the Louis Warschaw Prostate Cancer Center at Cedars-Sinai Medical Center (www.csmc.edu/5575.html), acknowledges that Gleason 7+ cells are more aggressively malignant and may have the ability to survive outside of the prostate. However, he stresses that the key question for each patient is whether the genes are turned on in his system that would allow prostate cancer cells to survive outside of the prostate. The technology to know that is still in the testing phase. Gleason scores and PSA’s are the only tools available now. Dr. Agus also orders bone and CT scans of the chest, abdomen, and pelvis for his Gleason 7+ patients to see if the cancer has spread into those areas and, if it hasn’t, to use as a baseline for future analysis.

If the selected primary therapy has not been successful, Dr. Agus would probably recommend chemotherapy, usually in a clinical trial. Dr. Agus says the gold standard chemotherapy regimen is Taxotere (docetaxel) plus prednisone. Two current Phase III clinical trials are enrolling patients. Details can be seen at: http://www.medicalnewstoday.com/medicalnews.php?newsid=36938

GVAX, the immunotherapy vaccine, has been shown to have positive results in the treatment of hormone-refractory prostate cancer. Data to date suggests a median survival rate that will exceed the current approved standard of chemotherapy—Taxotere (docetaxel) plus prednisone. Two current Phase III clinical trials are enrolling patients for further evaluation. Details can be seen at: http://www.medicalnewstoday.com/medicalnews.php?newsid=36938

Researchers at Cleveland Clinic and the University of California San Francisco have discovered a new virus, XMRV, that is 25 times more likely to be found in prostate cancer patients with a specific genetic mutation than men without the mutation. Additional information can be seen at: http://www.medpagetodaty.com/HematologyOncology/ProstateCancer/2741

Isis Pharmaceuticals has started clinical trials with Eli Lilly of an anti-cancer drug called LY2279596 that targets a protein called eIF-4E that is found in higher concentrations in breast, prostate, lung and other cancers. 

- North County Times
UPDATE by Diane Johnson

Androgen Deprivation Therapy

Synopsis:

**Definition:** Androgen Deprivation Therapy (ADT) lowers the levels of male hormones (androgens such as testosterone) in the body. These androgens, produced mainly in the testicles, can facilitate the growth of prostate cancer cells. Lowering androgen levels can make prostate cancers shrink or grow more slowly, but is not a cure or a substitute for other types of treatments.

ADT is used at different stages of the disease, in different drug combinations, and continuously or intermittently. All of these are still being investigated in various ongoing randomized studies, but the use of ADT is still increasing, particularly in the U.S. As Dr. Robert Dreicer, The Cleveland Clinic said at the 2006 ASCO Prostate Cancer Symposium, using ADT in hormone-refractory disease has evolved as a de facto standard, based more on biologic rationale than clinical evidence. The dilemma of whether to treat with ADT is complex. Prior to the availability of PSA testing in the 1980s, ADT was only used for symptomatic metastatic disease. Now a man with newly diagnosed prostate cancer and a rising PSA, even with no symptoms, is often treated with ADT. This is often at the patient's urging—when they prefer some treatment rather than none. But is this the best decision? There are no definitive studies that can answer that question and the exact benefits are still unclear. There is also a risk of over-treatment when the hormones are suppressed long-term. Consider the following updates and issues:

**Sometimes earlier ADT is better:** The Mayo Clinic recently published the results of a study showing that the timing of ADT administration is critical for one group of men with prostate cancer: men whose cancer had spread to the seminal vesicles (but not to the lymph nodes). All of the men had radical prostatectomies. Part of them received ADT within 90 days of the surgery and part of them did not. Interestingly, the men who received the early ADT had more aggressive prostate cancers. After monitoring the groups for several years, they found that the men who received immediate postoperative ADT had considerably better outcomes than similar men who did not receive such treatment. This survival advantage occurred despite the presence of significantly more aggressive prostate cancer in the group of immediately treated patients.

**Side effects of long-term ADT:** At the ASCO Prostate Cancer Symposium, Dr. Celestia Higano, University of Washington, gave a presentation titled: "Hormone Therapy: A Survivor's Guide". She not only listed the potential side effects of chemically lowering testosterone levels, she also presented a novel approach using a health care team to educate the patient before the hormones are administered. Dr. Higano said, "It is common for physicians to warn patients about "the big three" complications of starting ADT—loss of libido, erectile dysfunction, and hot flashes." She went on to describe other possible side effects under the categories of "what you feel" (fatigue, aches and pains, depression), "what you see" (weight gain, hair changes, gynecomastia (breast enlargement), and "what you don’t see" (anemia, loss of bone density, worsening of conditions like diabetes and heart disease).

**EDITOR’S NOTE:** Several studies have reinforced the importance of adding a bisphosphonate called zoledronic acid (Zometa) during the initial course of therapy to minimize loss of bone density and the risk of bone fractures.

She recommends putting together a team of specialists—nutrition, physical therapy, mental health, and sexual consultants—to consult with and educate the patient and their family before they start androgen deprivation therapy. For example, the physical therapist "should assess the patient’s risk..."
Update on IMRT (Intensity-Modulated Radiotherapy) For Localized Prostate Cancer

DR. MICHAEL ZELEFSKY
MEMORIAL SLOAN-KETTERING CANCER CENTER

Definition: IMRT is a more advanced, precise form of delivering 3D conformal radiotherapy. In the case of prostate cancer, a sophisticated computer program images the 3-dimensional shapes of the prostate, rectum, and bladder. Multiple external radiation beams are carefully shaped and sculpted to match the 3D shape of the prostate and deliver the doses. As a result, less normal tissue is exposed to the radiation and higher doses can be delivered making it more likely that the cancer cells in the prostate will be killed.

Who is a good candidate for IMRT?
The selection criteria for IMRT is virtually the same as for any form of radiation therapy. Contraindications include those with severe urinary obstructive symptoms, inflammatory bowel disease, and/or bilateral hip replacements. Otherwise it is an optimal dose escalation tool for the safest way to deliver high dose radiation therapy. Important benefits have been demonstrated in Phase 3 trials here and in Europe, especially for men with intermediate or aggressive disease. We have treated over 2500 patients at Memorial Sloan-Kettering with this approach over the last 12 years.

What are the advantages and disadvantages of IMRT?
One of the primary advantages of IMRT is that it is non-invasive treatment. In addition, it is less toxic--short and longer term side effects are much lower with IMRT than with other forms of treatment. For example, in a group we looked at with a minimum of 5 years follow-up after treatment, only 2% in the IMRT group developed rectal bleeding compared to 13% in the group that received 3D conformal at the same doses. Also, the risk of incontinence was lower compared to surgery. PSA control rates are also improved with the higher doses of radiation that IMRT allows. 90% of a group of patients with favorable risk disease and a minimum of 5-year follow-up were still relapse-free. From the physician’s point of view, it is possible to treat larger volume glands (60 — 80 grams) without using hormone therapy first to reduce the volume.

For the patient, the conventional IMRT regimen that is taken to high doses is very time-consuming. Currently at Memorial Sloan-Kettering the typical schedule is Monday through Friday for 9 or 10 weeks. On the clinical side, since there is a tighter dose distribution, organ motion from treatment to treatment due to rectal or bladder filling is even more of a concern than with other radiation therapies. Immobilization of the patient and precise set-up is even more critical. There has been some literature about possible secondary cancers developing as a result of the higher doses of radiation, but it is unclear if IMRT poses any higher risk of secondary cancers compared with external beam radiotherapy where the latter risk is relatively low.

Conclusions:
After 8 years of follow-up, we have found long-term rectal and urinary toxicities are lower than with other forms of radiotherapy delivery and biochemical control rates (PSA) are excellent across all risk groups. There are no randomized trials comparing IMRT to other forms of external radiation delivery at this time, but data strongly suggests that higher dose IMRT is associated with at least comparable outcomes and demonstrably improved tolerance.
Dr. Richard Payne:
Dr. Payne Looks at Palliation

We have the unique opportunity and honor to speak this month with Dr. Richard Payne, who is the Director of the Institute on Care at the End of Life at Duke University, the President of the American Pain Society and the Founder of the Initiative to Improve Palliative Care for African-Americans.

VS: Dr. Payne, could you please define Palliative Care for us?

RP: I practice a particular specialty of medicine palliative care which emphasizes the need and ability to see and treat the whole person and not just their disease. The physician must be sensitive to the patient’s concerns and be able to communicate effectively in medical and psychological terms. The goal is to provide medical treatment that takes into consideration their spiritual and psychological well-being. It is part of good medical care, good cancer care, and not something that should be viewed as apart or separate.

VS: At what point in their treatment should someone with prostate cancer seek the services of a palliative care specialist? For example, the reality is that a high percentage of patients will fail their primary therapy and the cancer will recur. In other cases, the first diagnosis will be at an advanced stage wherein the options are limited. In these situations we counsel that patients should review their situation with a medical oncologist in addition to the urologist and radiation oncologist. So when is it best to see a palliative care specialist as well?

RP: That is a very good question! One of the things that we really want to emphasize is that palliative care is not just used in treating advanced stage disease; it really should start at the time of diagnosis and maybe even before. I’ll give you an example; I had to have four needle biopsies before my diagnosis was finally made. As you know, and anyone who has ever had a biopsy knows, this is not the most pleasant or comfortable procedure. I am particularly grateful to my surgeon who gave me a local anesthetic each time before he did the procedure so that I would be spared some of the pain. That’s palliative care — paying attention to the physical well-being of your patient. I can honestly say that there were many times that I almost didn’t come in for a prostate exam because the prospect of the pain from the biopsy was more than I wanted to endure; but my doctor’s concern for my well-being and palliation ensured that I got the therapy I needed. My message is that men should demand and expect from their doctors adequate pain and symptom management from the time of diagnosis.

VS: Speaking to the point of biopsies, would you recommend that antibiotics be used as a matter of course?

RP: I would recommend that antibiotics be given 24 hours prior to the biopsy because, as you know, those biopsies are taken through the rectum and there are always germs there. Having antibiotics in the system prevents germs from migrating into the blood stream and causing a potentially serious infection. You also need to keep in mind that, even with antibiotics, you can develop a fever within the first 24 — 48 hours and you should contact the doctor immediately so you can get a stronger antibiotic.

VS: While it’s not all your specialty, Dr. Payne, it would be of benefit to our viewers to begin to understand how the side effects of advanced stage treatments should be dealt with palliatively.

RP: If it turns out that your diagnosis of prostate cancer indicates that the tumor is advanced, or there is failure after primary therapy, you may require hormonal or chemotherapy or additional radiation therapies; all of these can cause pain or physical discomfort. You should expect that your pain and fatigue that can occur with these treatments will be evaluated and treated — that’s palliative care!

VS: A significant issue that we’re seeing is the incidence rate of prostate cancer among younger men (less than 60 years of age) who, because of earlier diagnoses, are seeing recurrence of the disease or the potential of a secondary cancer and conditions relating to the treatment, such as lymphedema. How do you address these concerns?
Well, the recurrence of the disease is a complex issue that relates to a number of factors; sometimes it’s a case where it’s just not possible for the surgeon to remove all of the cancer, even under the best of surgical techniques. Then, that small nest of cancer that’s left behind will grow and require some secondary form of treatment such as radiation or hormonal therapy or chemotherapy. It’s also true, and this has some logic, that if your body has generated one cancer, it can also generate a second cancer. What we now know about cancer is that it’s usually a combination of genes that we have and environment in which we live, including diet, weight and lifestyle issues such as smoking.

Now, as to lymphedema, this is related to the extent of the tumor that is present and whether or not it is invading the lymph nodes or the veins in the pelvis, or whether any of those structures are compromised during the surgery. The lymphedema, or swelling of the extremities after surgery, results because the usual lymphatic drainage, or venous drainage, is compromised. Again it’s a complicated situation dependent on the size of the tumor and/or the location relative to the resection that has to be done. There are rehabilitation approaches such as bandages, wraps, and exercises that one can do to minimize the effect of the edema. This is why it's so important to stay involved with your doctors or ask for referrals to rehabilitation teams that are involved in managing these conditions.

Like pain, nausea can be a frequent side effect of chemotherapy, but can be treated effectively with medications prescribed by your doctor at the time of chemotherapy introduction. While some people will experience nausea and vomiting, we have learned much more about how to mediate people appropriately to minimize these side effects. Mucositis refers to the inflammation of the mouth, the lining of the cheeks and the tongue caused by the cytotoxic agents that will kill the cancer cells but also can kill those rapidly growing healthy cells. This can cause pain in the mouth, sore throat, and infections in the oral mucosa. Again, you need to use common sense in treating the condition: maintain good oral hygiene with regular dental check-ups and use mouthwashes with local antiseptics like lidocaine to help with the soreness. In some severe cases of throat pain, people will stop eating, which then complicates their overall nutrition. So we will prescribe a powerful pain medication to help with the soreness. In some severe cases of throat pain, people will stop eating, which then complicates their overall nutrition. So we will prescribe a powerful pain medication to help with the soreness.

Please give us some background on other conditions such as anemia, nausea, mucositis, weight loss, fatigue, etc. that are more related to radiation therapy, hormonal or chemotherapy. What should the patient do in communicating with their doctor and what can be done to mitigate the effects.

With anemia the signs that you typically see are weakness and fatigue—your energy stores are not as great as they used to be. With chemotherapy in particular, the drugs given suppress the ability of the bone marrow to make red blood cells, which is what anemia is. To counteract this condition you must be certain that your nutrition is adequate and that you’re receiving sufficient amounts of iron, so the reserves that are left in your bone marrow are being nourished adequately to make the red cells. Plus there are medications that you can take that boost the bone marrow’s ability to make red blood cells, such as ProCrit®. There are also basic common sense techniques you can use with instructions from your doctor to minimize the disability. We used to think that you needed to stay in bed, but we’ve found that only makes you more disabled; what you have to do is engage in gentle exercise, like walking.

Like pain, nausea can be a frequent side effect of chemotherapy, but can be treated effectively with medications prescribed by your doctor at the time of chemotherapy introduction. While some people will experience nausea and vomiting, we have learned much more about how to mediate people appropriately to minimize these side effects. Mucositis refers to the inflammation of the mouth, the lining of the cheeks and the tongue caused by the cytotoxic agents that will kill the cancer cells but also can kill those rapidly growing healthy cells. This can cause pain in the mouth, sore throat, and infections in the oral mucosa. Again, you need to use common sense in treating the condition: maintain good oral hygiene with regular dental check-ups and use mouthwashes with local antiseptics like lidocaine to help with the soreness. In some severe cases of throat pain, people will stop eating, which then complicates their overall nutrition. So we will prescribe a powerful pain medication to aid the eating process. That’s the bad news; the good news is that all of these conditions can be treated and will go away once the chemotherapy is stopped.

We have also seen side effects and complications resulting from the use of hormonal therapies either alone or neoadjuvantly with another modality such as radiation. We note things like gynecomastia (enlarged breasts), etc.? Those are much more difficult to deal with because they are direct effects of the hormone therapy and if you try to antagonize those effects you can diminish the effects of the hormones in treating the cancer. So what you try to do is to give the minimum dose of these hormones, which are usually estrogen or anti-testosterone hormones. Since these are basically female hormones, they can promote female type reactions such as hot flashes, enlarged breasts, etc. Again, if the hormonal therapy is successful and can be stopped, then those conditions will recede.

Let’s talk a bit more about advanced stage disease, when metastasis occurs either to soft tissue or to bone. What are some of the issues to be dealt with?

One thing that we know about prostate cancer is that it likes bone, and by far the most common metastasis is to the bone. There, the most typical symptoms are pain and, if the bone is weakened enough from the cancer, it can actually fracture thereby causing even more pain. The reason we have bone is to protect our skeleton and our spinal cord; but, if the prostate cancer goes into the spine and grows through the spine, it can cause paralysis also causing pain and weakness. In this day and age we should be able to prevent most of the paralysis that occurs with prostate cancer because we re
taught now that patients who have prostate cancer and pain in their back or neck need to get immediate evaluation with a neurological examination and a MRI scan. The MRI is a particularly good tool because we can see the tumor's progression and evaluate whether or not it has begun to invade the spine. If that's the case, we can begin to treat it with radiation, steroids and, if necessary, with surgery.

The soft tissue metastases are much less common, but can occur. They typically occur in the pelvic area because cells escaped from the prostate and began growing in the surrounding tissue. It can cause pain or swelling in the legs, swelling in the scrotum and sometimes can metastasize to the liver causing pain and swelling in the abdomen.

VS: We've seen a lot of press recently about the potential for addiction to pain medications. Conversely, it has also been well documented that in many cases patients aren't receiving an appropriate dosage level of pain medication to keep them comfortable. How do you address this dichotomy given that many patients believe that they're supposed to be in pain because they have cancer and, as recently reported by AARP's magazine that only 7% of medical schools offer courses in pain management?

RP: I know as much about this as anything I know in medicine because it's the area that I've specialized in. Let me first say that in working in cancer centers for the past 20 years, we've had the experience of treating literally thousands of cancer patients with strong pain medications when they've needed them and we can say without question, if you have pain and if your pain is being treated with the appropriate amount of medication under a doctor's care and if you have never had a history or problem with abuse of substance, then the chance that you will become an addict is less than one-half of 1%. This is something that we can say with a great deal of assurance! In fact, people, as you suggested, are so afraid of becoming addicted that they often don't take enough pain medication to control their pain adequately.

Patients and families do have an exaggerated fear of addiction and feel that doctors won't be able to control the side effects. The side effects of strong pain medications, like morphine, are constipation and what I call, mental clouding and sedation, a sense that you can't get your thoughts together and feel foggy. Constipation occurs in everybody and what you do is make certain that you prescribe a laxative when you prescribe the pain medication. The mental clouding and sedation is a bit more difficult to deal with, but there are a couple of points to make: one is that the condition doesn't occur in the majority of patients; most patients taking pain medication will remain clear-headed enough to perform all regular functions, including driving. The other point is that when it does occur we can switch the patient to another medication — morphine, OxyContin, methadone, dilaudin, etc. — and match the drug that is most appropriate to the patient. In a few cases the mental clouding will remain despite a switch in medications; in those instances we may add another agent which can be as simple as caffeine or another prescription medication, such as Ritalin or a newer medicine called ProVigil, which is approved by the FDA to treat narcolepsy. The key is that if your regular doctor is not controlling your pain, you should ask for an immediate referral to a specialist in pain control.

VS: Is this mental clouding the same condition as chemo-brain?

RP: No, mental clouding has more to do with the way the pain medications bind to certain proteins in the brain while chemotherapy has a different mechanism. They are the same in that if you are experiencing these symptoms, you should go to your doctor and get treatment to alleviate these conditions.

VS: Are there any points you want to leave us with?

RP: There is a quiet revolution occurring in medicine taking patient treatment back to its roots of encouraging increased patient/doctor communication and involvement as well as greater recognition for the patient as a whole being. We can perform miracles in medicine — transplanting organs, replacing body parts, curing diseases that used to have 100% mortality rates. On the other hand, we also know that no matter how good our medical care is, we're all going to die and many of us die as a result of a chronic illness. We have to talk about death and dying, but also talk about advancing medical care; it's not an either/or situation, it's both.
Androgen Deprivation Therapy

of falls to prevent fractures and recommend appropriate exercises to minimize bone density and muscle mass loss.” Dr. Higano also recommends getting baseline measures of blood pressure and weight, a complete blood count, and, possibly, liver function tests. The patients should be encouraged to maintain routine healthcare like regular screenings and “receive counseling about smoking, excessive alcohol, or caffeine intake.” While it is certainly true that not every man will experience any or all of these side effects, she believes that “learning about them beforehand and understanding how they can be prevented, monitored, or treated will help patients during their treatment.” This can also reduce the stress and anxiety the patient’s family might feel if the side effects occur. The hope for the future is that genomic profiles will identify which patients would best respond to ADT with which combination of drugs. “Given that many patients with biochemical relapse will live for many years, it is of utmost importance to prevent additional morbidity for people treated with ADT”, Dr. Higano concluded.

Primary Androgen Deprivation Therapy: When a man hears that he has prostate cancer he wants a definitive treatment plan. Primary ADT is sometimes prescribed at this point as a response to the patient’s urgency, especially if surgery and radiation are not possible and other local treatments have been refused. Rather than do nothing (watchful waiting), the physician will often prescribe a course of hormone injections. Studies have shown that the use of ADT is on the rise, especially in low and intermediate risk groups, says Dr. Michael Carducci of Hopkins Kimmel Cancer Center. It is also most often used for men over 70 years of age and for men who have high risk disease. In addition, it is prescribed most often in the Southern and Eastern states and in community practice settings (92%) vs. academic centers (80%). But is this the best decision?

The physician must consider a man’s age, co-morbidity (any other diseases present), and risk of disease progression to determine whether to use local therapy, hormonal therapy, or defer treatment for the time being. The patient must be fully informed about the potential risks and side effects of any treatment. If the decision is made not to prescribe a therapy at that time, it needs to be explained carefully as well. This is often a difficult thing for the patient to understand and can cause emotional distress. Often low risk patients still want therapy, but the risks of long-term hormone deprivation vs. the risk of disease progression may not recommend it. In these cases, there is a risk of over-treatment.

Is ADT better than no treatment at all? There are no definitive studies that can answer those questions as yet. Does hormone therapy slow the progression on prostate cancer? Yes. According to some small studies, five to eight year survival rates appear to be the same, but there is no definitive published randomized data comparing other alternatives such as watchful waiting, placebo, etc. At Johns Hopkins, hormones are used, but androgen ablation is deferred until clinically significant events occur. Does hormone therapy improve survival, quality of life, or delay death? It has potential benefits to both the patient and the healthcare provider and is appropriate for life-threatening disease. But the exact benefits are still unclear and it is unlikely that this question will be answered in large randomized trials.

Chemotherapy In Practice

During the chemotherapy process, Dr. Agus is constantly assessing how the patient is feeling. He says that is the best indicator of how well it is working put simply, are their symptoms better? He also continues to monitor PSA’s and get regular CT and bone scans. The dosage levels given are very individual. For example, many prostate cancer patients are elderly, so their toxicity levels need to be monitored carefully.

The future of chemotherapy for the treatment of prostate cancer is extremely promising. Dr. Agus explains that soon one drop of blood can be used to produce a complete protein profile of a patient. (called global proteomics). This, combined with the technology of genomics, will allow a more precise diagnosis and the ability to find the right drug for the right patient. In addition these individualized, molecular-directed therapies will have far fewer side effects. These are being developed over the next several years and are already being tested in clinical trials. It’s not science fiction anymore, says Dr. Agus.

EDITOR’S NOTE: The complete interview with Dr. Agus can be seen online at www.prostate-online.com/cytotoxic.html
Knowledge Net Blows into the Windy City

The Prostate Net, in partnership with Rush University Medical Center’s Department of Preventive Medicine and the American Cancer Society’s Illinois Division, launched the next phase of its continuing Barbershop Initiative. The new program called The Knowledge Net places educational kiosks with an interactive computer system in selected barber shops around the country to enhance the ability of men to better understand the risks from the disease and to better assist barbers in getting men to participate in the healthcare system.

The three initial shops in Chicago are:
- Maxima Barber Salon — 949 West Madison Street
- Nu U Hair Salon — 4138 North Sheridan Road
- Kilos Barber & Beauty Shop — 3855 West Ogden Avenue

The total number of participating shops is expected to increase to 10 by yearend.

We all know that men in general and black men in particular are notorious for not taking care of their health, going to the doctor or getting routine checkups, said Joe Harrington from Rush. But we do go to our neighborhood barbershops. Just like in the successful Barbershop movies, our own local barbershops are important centers for community, cultural and social activity. I am excited about the opportunity to do two things: get more people involved in the computer and the Internet and get this important information out. The Prostate Net developed this proprietary multi-media educational interface in conjunction with the Mt. Sinai (NY) School of Medicine’s Division of Educational Technology and the UMDNJ-NJ School of Medicine’s Office of Cancer Control and Prevention.

In addition to disseminating education, The Knowledge Net also serves as a vehicle to gain important consumer data. We have embedded a survey as part of the program said Virgil Simons, President of The Prostate Net, that will give us information on those coming into the barbershop, their, and their family/friend’s, awareness of and experience with the disease, and their awareness of the other health co-morbidities that impact their community.

The next planned deployments for The Knowledge Net will be in the following markets: Hartford, CT; Atlanta, GA; New York, NY; Washington, DC and Newark, NJ. For more information contact Virgil Simons: 1.888.477.6763 or virgil@prostatenet.org