

# Go Team!

## A MULTIDISCIPLINARY RESPONSE TO INCREASES IN LIVER CANCER INCIDENCE AND DEATH

By Karen Tatum

While many of the most common cancers have seen a decline in recent years, doctors and scientists have noted recently that both the incidence and mortality rates for liver cancer have increased. It's a disturbing trend that is particularly notable in certain states—ours being one of them.



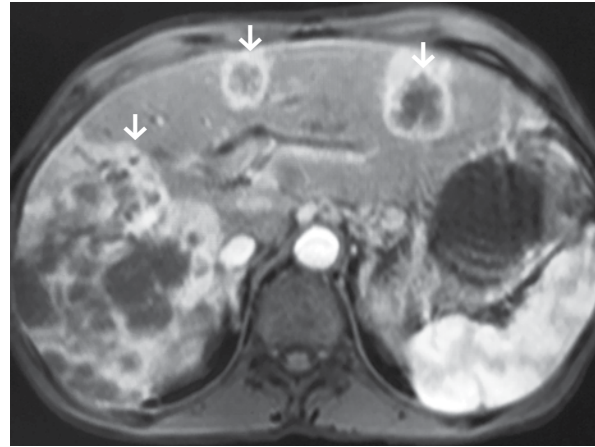
## CANCER

“We have seen a significant increase in liver cancer in the past few years,” says Dr. Oleana Lamendola, Gastroenterologist at Baton Rouge General. “If it keeps growing at this rate, we can expect to see approximately 39,000 new cases of liver cancer in the U.S. through 2016, and even more startlingly, 27,000 deaths this year.”

Similar results were reported in the Annual Report to the Nation on the Status of Cancer (1975-2012) released as a collaborative effort by the American Cancer Society, the Centers for Disease Control and Prevention, the National Cancer Institute, and the North American Association of Central Cancer Registries. Some of the key findings in that report include:

- Worldwide, liver cancer is the fifth most common cancer among men, the ninth most common cancer among women, and the second most common cause of cancer death for men and women combined.
- In contrast to the trends for most other cancers among both men and women, death rates due to liver cancer have increased the most compared with all cancer sites.
- From 2008-2012, liver cancer incidence

Cancer in the liver.



increased an average of 2.3 percent per year overall.

- In that time period, the liver cancer related death rate increased by an average of 2.8 percent per year among men and 3.4 percent per year among women.
- In all racial and ethnic populations, about twice as many men as women were diagnosed with liver cancer
- Hepatitis C and liver cancer-associated death rates were highest among those born

between 1945-1965 (which also represents the age group of the majority of Americans with Hepatitis C).

- Age adjusted incidence rates for 2008-2012 of liver and an intrahepatic bile duct cancer in Louisiana were 7.5-12.5 per 100,000 people, some of the highest rates in the country

So what is going on? We asked for input from Baton Rouge General’s Pennington Cancer Center as well as from members of the newly launched Hepatobiliary Multidisciplinary Care Team (MDC) at the Mary Bird Perkins-Our Lady of the Lake Cancer Center. (The Hepatobiliary MDC also treats cancer of the pancreas and upper GI tract.)

“It’s a higher rate of HCC (hepatocellular carcinoma) as a result of hepatitis, probably,” said Dr. John Lyons, Surgical Oncologist, and chair of the Hepatobiliary MDC. “I think it’s more the maturation of that chronic hepatitis,” clarified Dr. William A. Anderson, Gastroenterologist, and another member of the MDC. “Most of it is in my age group. They’ve



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Dr. Oleana Lamendola, Gastroenterologist, Baton Rouge General.

**c. 150**



Galen practices and teaches pharmacy and medicine in Rome. His principles of preparing and compounding medicines become the standard for 1,500 years.

**c. 400-1100**

In Europe, monks gather and grow herbs to prepare medicines and treat the sick.

**c. 700**

Arabs open the first apothecary shops in Baghdad. The tradition travels with the Muslims to Europe.



**“All of us have different techniques and modalities that can be used to treat liver cancer. Sometimes it’s a combination, we’ll resect this and we’ll embolize this, or sometimes they just need medical therapy. We do it in a multidisciplinary fashion.”**

Above, from left, Dr. John Lyons, Surgical Oncologist; Dr. Ryan Majoria, Radiologist; Dr. Joseph R. Shows, Medical Oncologist; Dr. William A. Anderson, Gastroenterologist

had it long enough that they’ve developed tumors now as a complication. You have to have the disease long enough to develop cirrhosis and put yourself at risk for hepatocellular carcinoma, and that’s what’s happening...most of those patients have had disease for 20 plus years.” According to the Cancer Status Report, “The incidence of HCV (Hepatitis C) infection was highest during the 1960s to 1980s, before the virus was discovered and preventive measures, including HCV screening of the blood supply, became possible.” That is why the age group of those born from 1945-1965 is considered at higher risk.

According to the report, both forms of viral Hepatitis (B and C) contribute to greater than 60% of HCC cases across the world. Other risk factors for liver cancer include excessive alcohol consumption, obesity, nonalcoholic fatty liver disease, metabolic disorders, and Type 2 diabetes, some of which might also explain Louisiana’s high incidence rates.

While Dr. Lyons believes that both the high

incidence and death rates in Louisiana are multifactorial, including some issues with education and access, Dr. Joseph R. Shows, a Medical Oncologist on the team pointed out, “We also have higher rate of alcohol abuse, more cirrhosis, so lifestyle is part of it as well.”

So here in Louisiana we have the aging of a population that was at higher risk for viral hepatitis, in addition to access to care issues, other disease factors, and lifestyle choices contributing to the state’s high numbers. And, unlike skin, breast, or colorectal cancer, there is no formal and widespread screening program for liver cancer except for those who are already presenting with liver disease.

“I think the United States Preventive Task Force Services recommends screening everyone born from 1945 to 1965 for viral hepatitis,” said Dr. Lyons. The American Cancer Society lists the hepatitis virus as a Class I carcinogen “along with benzene and tobacco, plutonium and every other awful

chemical. It’s right up there with them,” said Lyons. But unless someone presents with cirrhosis or abnormal liver enzymes, said Dr. Anderson, they are unlikely to be screened for liver cancer. Even those patients can be asymptomatic for so long it would be hard to get people to come for the screening and it would be expensive to screen the general population without cause.

“Most of the time, liver cancer is a result of chronic liver disease or cirrhosis, but not always,” agreed Dr. Lamendola. “Baton Rouge General, along with Pennington Cancer Center, focuses on treating the underlying conditions that lead to liver damage, screening those at risk, and treating those who are diagnosed with liver cancer.”

Preventing the spread of HCV infections and widespread use of the Hepatitis B vaccine are no doubt the best bet for liver cancer prevention, along with discouraging unhealthy behaviors and reducing obesity. Unfortunately those with liver damage can

“...they can offer their expertise in different treatment modalities in discussions of a specific patient. This collaboration and sharing of information and ideas is especially important for such complex cancers.”



be asymptomatic for a long time and liver cancer is very complex and subject to a lot of different treatment modalities, explained Lyons.

“The options for liver cancer can range from everything from liver transplantation, which is not something we are currently doing here, to liver surgery, which is what I do, medical therapy which is Dr. Shows’ specialty and ablative therapy, where probes are placed into the liver that cook the tumor, or something called embolization, which is what Dr. Majoria (Ryan Majoria is the MDC’s radiologist) does,” said Lyons. “All of us have different techniques and modalities that can be used to treat liver cancer. Sometimes it’s a combination, we’ll resect this and we’ll embolize this, or sometimes they just need medical therapy. We do it in a multidisciplinary fashion.”

“Oftentimes with this type of tumor, I’ll tell patients we are going to treat this as a chronic disease because there are so many different tools we can use to treat it,” agreed Majoria.

The four physicians, Lyons, Anderson, Majoria, and Shows are only part of the fledgling team, which will also include a radiation oncologist, navigators, clinical trialists, physical therapists, occupational therapists, pathologists, and dieticians. Although the group is still coming together it is modeled on, and also overlaps with, the existing MDCs at the Cancer Center.

In 2007, a NCCCP grant required the formation of multidisciplinary care teams and the cancer center continued the model after the grant ran out. “They started out with lung, and colorectal, then head and neck,” said Lyons. “Since then we have added skin and

soft tissue and this year we are rolling out liver in response to this increased incidence that we are appreciating.” In fact, according to Cancer Center Administrator Linda Lee, the center hopes to have eight MDCs fully functional by the end of the year. “These are all a result of doctors coming to us to say, ‘We want this,’” said Lee. “Nobody here said, ‘Oh, in 2016 we are going to add hepatobiliary.’ The doctors are really wanting to home in on disease site specific stuff to get the best information, the best knowledge, for the best care of the patient.”

To a potential patient, it may seem overwhelming to see all those names, titles, and specialties, but both Lee and the team physicians are quick to point out that the patient is not passed from one to another. “We are really just making sure that as a system and as a group we are doing what’s best for the patient,” explained Dr. Shows. “That way we can all agree we have the right pathway and the right people in place; that we’re doing the best therapy based on the best evidence.”

In other parts of the country there are multidisciplinary clinics where a patient might meet with a liver oncologist, a pathologist, a radiation oncologist, and a surgeon all at the same clinic. The setup allows the patient access to some of the best experts in the field, but anecdotal evidence suggests that it is not only potentially overwhelming for the patient, but also an inefficient way for the physicians to practice, especially if they are having to fly in for the consultations.

The set up at Mary Bird Perkins-LOL Cancer Center is a little different. First, there are weekly site specific tumor conferences, which include not only the physicians on the MDCs, but also geneticists, navigators,

clinical trialists, etc. to review cases in a multidisciplinary fashion.

“Every Wednesday morning we meet to discuss cases,” explained Lyons. “We present cases of patients we see in our offices. We are presenting these cases in a kind of forum where they may see one or two of us and then we discuss their care amongst a group of doctors and ancillary practitioners to get the best care. And then we make a formal recommendation.” Separate from the tumor conferences are the steering committee meetings where the MDC members discuss best practices, engage in continuing medical education, review clinical trial presentations, and develop protocols. “The goals are expanding clinical trials and improving time from diagnosis to treatment, and ensuring what we are offering patients here is the same as they would get at the best institutions in the country,” said Lyons. “It’s a really good goal.”

These meetings allow the MDC members to share new information that they have encountered as part of their specialty, their reading, the conferences they attend, so all team members are better informed about what’s out there. In addition, they can offer their expertise in different treatment modalities in discussions of a specific patient. This collaboration and sharing of information and ideas is especially important for such complex cancers. “I know my business, the surgery business,” said Lyons. “But it’s good



to communicate with Ryan (Majoria) about what's going on in the world of radioembolization. It's good to talk to Dr. Anderson about what's going on in the world of screening and medical treatment of hepatitis, and Dr. Shows about what's coming down the pike in terms of medical therapies. It keeps us all engaged because we all have the same interest, the same endpoint. You learn a lot. It's as beneficial to me as it is for the patient." In addition, said Majoria, it can save the patient time. Rather than going from doctor to doctor looking for different opinions or treatment plans, the team can draw on all of their expertise to suggest the best plan of action.

While MDCs are fairly common at academic medical centers, it is unusual to find them at community hospitals. The difference goes deeper than that, points out Lyons. "When you have an academic medical center

everybody is employed by the same house and goes to the same meetings and the same lunchroom. In a private practice setting everybody has privileges at different hospitals, so you are really doing it for the love of the patient, not necessarily for the love of the institution. We all have different hats and we're all employed by different people...it's a different dynamic."

Because there are physicians from different groups working together, one of the most important goals for the group is to establish protocols for providing the best care for liver cancer, pancreas cancer, and upper GI cancer patients. They are focused on improving the time from diagnosis to treatment and also expanding the portfolio of clinical trials available to patients. Longer term goals include community outreach and establishing screening mechanisms. They are lofty goals for a still developing group, but all of the physicians are on board.

"I know for myself I want to do the best I can possibly do at anything I do, but in particular caring for my patients, and that's offering the best therapy with the best technique," said Majoria. "I know these guys share the same sentiment and we're not in this just to do it, we want to be the best we can and that requires everybody to work together and I think we can do that at a community hospital. It doesn't have to be a big academic institution to be able to offer state-of-the-art therapy at even a level higher than a lot of those academic institutions because there the experts aren't necessarily the ones treating that patient directly or doing the procedure themselves...they have residents and fellows."

"Baton Rouge patients have fantastic

options for treatment close to home," agreed Lamendola. "In the late 90s, one in five patients would leave the area to get cancer care. Today, fewer than 1% of cancer patients leave Baton Rouge for cancer care."

Developing best practice protocols also means the individual physicians can bring those best practices back to their own practices, disseminate that information and have a more homogenous level of treatment across the board, explained Anderson.

The dissemination works both ways, adds Lee. "There's a plethora of very technical protocols that doctors look at when they are starting to see trends in their practices, they will bring it back to the group and then we will dig in our data to find out, let's look at what our population is, how it compares to the national, are there any common factors with these patients that have outcomes that are different from others? They are very technical...that's what doctors do; they get down to the practice patterns."

"That has been a very rewarding thing for me to observe as an administrator," said Lee. "Having the physicians be so incredibly engaged and so forward thinking. It's really about the synergy that comes from having all of these multidisciplinary doctors getting together and centered around one interest area or a group of cancer disease sites, and really looking at this, looking at incidence, looking at how many patients they're treating. There are all kinds of metrics that they look at, and bringing in the NCCCP guidelines, and looking at quality studies. So it is going to be very exciting. It's always a good sign at a cancer center when you have physicians that are pushing for these things." ■

1%

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C. 1000

The pharmaceutical teachings of Ibn Sina, pharmacist, poet, physician, philosopher, and diplomat, are the accepted authority in the West until the 17th century and still are dominant influences in Eastern cultures.

1240

Holy Roman Emperor Frederic II issues a decree by which the professions of physician and apothecary are separated.

1345

The first "pharmacy" opens in London.