## Professor Carlos Eduardo R. Santos: my experiences with liver metastases of sarcoma

Submitted Jun 05, 2013. Accepted for publication Jun 15, 2013. doi: 10.3978/j.issn.2304-3881.2013.08.08

View this article at: http://dx.doi.org/10.3978/j.issn.2304-3881.2013.08.08

Dr. Carlos Eduardo R. Santos (Figure 1) is an expert in liver surgery. His clinical interests include hepatectomy, sarcoma, liver metastasis, liver surgery, retroperitoneal tumors and related maters. Dr. Santos is a Surgical Oncologist and earned his MD from State University of Rio de Janeiro in 1993 and PhD in Oncology from Brazilian National Cancer Institute in 2010. Dr. Santos has published a lot of research articles, reviews and books chapters in this field. He is the funder member and current president of the Brazilian Chapter of IHPBA.

HBSN: Could you please give us a brief introduction of liver metastases of sarcoma in terms of classification, early diagnosis, treatment and outcomes?

Dr. Santos: Liver metastasis of sarcoma is a disease that is really difficult to handle, because the majority of the patients with metastases of sarcomas are not operable. In the past 15 years, we operated 28 patients, but until now it is the 3rd biggest statistical data in the world. The biggest statistical data shows that 66 patients survived from metastases of sarcomas in the past 30 years in the US. We found that removing the liver metastases of sarcomas might improve prognosis of the patients. It made the survival time about 3 times longer than those without resection. I am trying to show that if you have patients of sarcoma with resectable liver metastases, you can think about resecting the liver metastases. Do not let patients deteriorate if resection is possible. In exception of Gastro Intestinal Stromal Tumors (GISTs), there is no chemotherapy that works for them, and surgery is the only way to improve survival time for them.

HBSN: So in your later presentations, you will speak about your experiences in liver metastases of sarcoma. How do your experiences compare to those of other people in this field?

**Dr. Santos:** We showed a better survival rate in resectable patients in our series in Brazilian National Cancer Institute. It is very hard to achieve operability on these patients due to



Figure 1 Professor Carlos Eduardo R. Santos.

disseminate disease in most of cases. You have to rigorously select the patients, to achieve a radical resection to improve survival to our level of 52.7% in 5 years, with a median survival of 60 months comparing to 30 months in non-operative patients. The non-operative treatment is until now only possible with Imatinib in cases of GISTs. Other adjuvant treatments can increase complication without a benefit in survival for others sarcomas. We strongly recommend liver resection when radical resection is possible, especially in low-grade sarcomas, always avoiding blood transfusion when possible, even performing a new resection in case of recurrence when it is possible.

HBSN: What are the advances in treatment of liver metastases of sarcoma?

Dr. Santos: Advances shall arrive in increase indication of

liver resection in this disease, which we didn't know before. In 1970s, if patients were found with liver metastases, it was equal to a sentence of death and nobody could do anything. Then we began to operate the patients with colorectal metastases, and we keep going on. It begins with 25% survival, then 50% survival, some centers even have 60% survival. We must try to resect those patients because until now, even with the great improvement for adjuvant treatment as chemotherapy, resection still the only treatment which can achieve long-term survival or improving survival with appropriate operation. We are studying and trying to show if there are some tumors that have also a good response rate with resection, sarcoma is one of them.

## HBSN: What do you think the possible future developments will be in liver metastatic sarcoma?

**Dr. Santos:** We expect that molecular therapy as well as improved new chemotherapy drugs can spread to other kinds of sarcomas. In that way, we should prolong survival of the patient much longer. For example in GIST, Imatinib

Cite this article as: He VJ. Professor Carlos Eduardo R. Santos: my experiences with liver metastases of sarcoma. Hepatobiliary Surg Nutr 2014;3(3):163-164. doi: 10.3978/j.issn.2304-3881.2013.08.08

had a great impact, that before this use the life expectancy for metastatic disease was 3 to 6 months, and now can reach to years by taking pills day by day. So I hope this can apply to other tumors.

## HBSN: In your expert opinion, what do you think is the biggest obstacles to the treatment?

**Dr. Santos:** Cancer research and treatment is always hard, especially on sarcomas that are a huge group of totally different diseases and with different cells origins. We will keep searching for news treatments for ours patients and trying to improve those we already know as the liver resection of sarcomas metastasis.

HBSN: Thank you for your time.

## **Acknowledgements**

Disclosure: The author declares no conflict of interest.

(Science Editor: Vicky J. He, HBSN, editor@thehbsn.org)