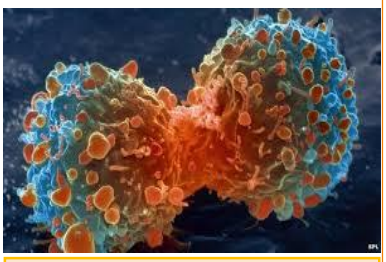
Volume II, Issue 9

The Alliance
LEADERSHIP IN ORGAN DONATION AND TRANSPLANTATION

EDUCATION CORNER

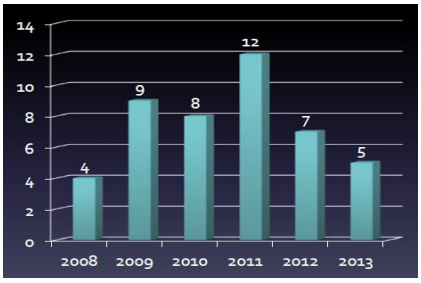


Malignancies and Organ Donation

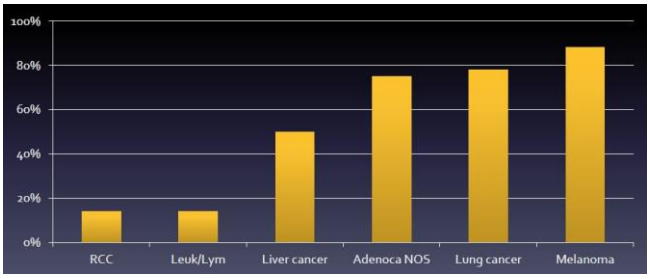
What are the malignancy transmission and mortality risks in organ donation?

- Tumor transmission occurs in approximately 1 per 3,000 (0.03%) transplants
- Mortality varies according to the type of transmitted tumor

Annual Donor Malignancy Transmission Events



Mortality in Recipients Who Developed Donor-Transmitted Cancer



Assessing Malignancies in a Potential Donor At Time of Donation:

- Determine cause of neurologic decompensation in brain dead patients - Hemorrhage can occur within tumors, especially melanoma, renal cell carcinoma, choriocarcinoma, lung cancer, glioblastoma (adults), medulloblastoma (children)
- Skin - In addition to tumors (esp. pigmented), look for signs of prior surgeries; examine palms and soles (melanomas)
- Thoracoabdominal cavity and pelvis - removal of perinephric fat to look for kidney tumors and cysts at time of recovery

With active or historical donor neoplasia, questions to consider include:

Regarding the donor:

- What is the specific type of tumor? What is the extent of the tumor, i.e. stage?
- What is the risk of tumor transmission based on current available evidence?
- How long ago did the tumor occur? What is the tumor-free interval?
- What is the expected 5 year disease-free survival in the non-transplant population?

Regarding the recipient:

- What does the potential recipient want? Is there a clear understanding of the risks involved?
- What type of post-transplant screening would be appropriate? For how long?
- What treatment options are available if the tumor is transferred?
- What are the alternatives for this patient if transplantation is deferred due to concerns about transmission?

Points to Remember:

- ✓ The rate of tumor transmission is extremely low in the current system
- ✓ Though many cancers contraindicate donation, it is likely that some usable organs are being discarded (i.e. small and solitary renal cell carcinomas, CNS tumors)
- ✓ Various resources and references can be found on the OPTN site and in the "NOTIFY Library"(www.notifylibrary.org)

Taken from a webinar presentation by Michael A. Nalesnik MD (Professor of Pathology, Division of Transplantation Pathology, University of Pittsburgh Medical Center, Pittsburgh, PA). Special thanks to Dr. Nalesnik for his contributions to this inservice.

Donor-Transmitted Malignancies in Organ Transplantation: Assessment of Clinical Risk. Nalesnik MA, Woodle ES, DiMaio JM, et al. (2011), AJT, 11(6): 1140-1147.

Organ Transplantation from Deceased Donors with Cancer: Is It Safe? Nalesnik MA, Ison MG. (2011), Open Access Surgery, 4. pp. 11-20.

OPTN Improving Patient Safety Patient Portal: https://optn.transplant.hrsa.gov/news/a-new-way-for-professionals-to-report-patient-safety-events/

NOTIFY Library - http://www.notifylibrary.org/

This inservice is also available on The Alliance blog: http://organdonationalliance.org/educationcorner-malignancies-organdonation/

A special thanks to Elizabeth Spencer from Elizabeth Katherine Communications LLC for her contributions to this issue.

Editor: Hedi Aguiar RN, MSN, Director of Programs and Communications, The Alliance, haguiar@odt-alliance.org. ODTA/EC/DonorCA/082616
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