

REVIEW ARTICLE

## Malignant neoplasms in the neonate

Marta Zapata-Tarrés<sup>a,\*</sup>, Daniel Ibarra-Ríos<sup>b</sup>, Irma Viridiana Cruz-Rodríguez<sup>c</sup>,  
Luis Enrique Juárez-Villegas<sup>d</sup>, Humberto Peña-del Castillo<sup>e</sup>

<sup>a</sup>*Servicio de Oncología, Instituto Nacional de Pediatría, Mexico City, Mexico*

<sup>b</sup>*Departamento de Neonatología, Hospital Infantil de México Federico Gómez, Mexico City, Mexico*

<sup>c</sup>*Medicina Materno Fetal, Hospital Gineco-Obstetricia Luis Castelazo Ayala, Mexico City, Mexico*

<sup>d</sup>*Servicio de Oncología, Hospital Infantil de México Federico Gómez, Mexico City, Mexico*

<sup>e</sup>*Enseñanza, Instituto Nacional de Pediatría, Mexico City, Mexico*

Received 23 May 2013; accepted 30 May 2014

**Abstract** Cancer in children has characteristics that differentiate it from other types reported in later ages. Overall survival at 3 years is up to 70% depending on the tumor studied. Major organs and systems affected are the hematopoietic system, central nervous system and sympathetic and mesenchymal tissues.

The increased incidence of neonatal tumors observed in this and other studies is based on the increasing number of solid tumors (teratomas and neuroblastomas) because cases of central nervous system tumors and leukemias have remained constant.

Ultrasonography is the first line of approach and can detect up to 70% of fetal anomalies. The physiology of the newborn causes the necessary multidisciplinary treatment in neoplastic disease to be modified substantially in this age group to avoid toxicity and sequelae. The most common treatment is surgery.

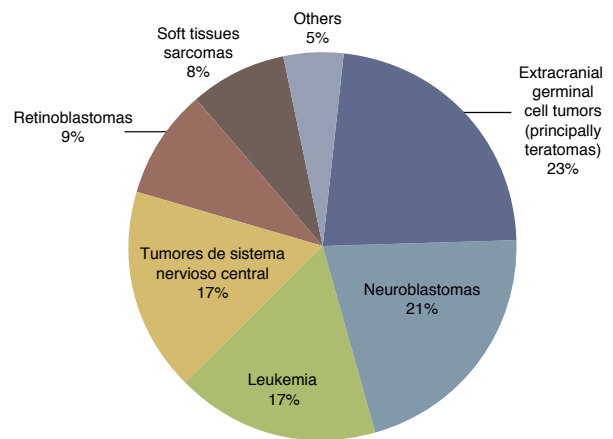
Achieving timely diagnostic treatment options are effective in improving the survival of these patients.

© 2013 Hospital Infantil de México Federico Gómez. Published by Masson Doyma México S.A. All rights reserved.

\*Corresponding author.

E-mail: magazapata@yahoo.com (M. Zapata-Tarrés).





Malignant neoplasms in the neonate\*

Neoplasm	Frequency	%
Neuroblastoma	18	22
Langerhans cell histiocytosis	12	15
Immature teratoma	10	12
Rhabdomyosarcoma	8	10
Retinoblastoma	8	10
Leukemias	5	6
Hepatoblastoma	4	5
Others	16	20
Total	81	100

\*69-year experience of the Hospital Infantil de México Federico Gómez.  
Source: Cicero OC et al.<sup>9</sup>















