

## UROLOGICAL DISORDERS ARE STILL THE LEADING CAUSE OF DEATH IN PATIENTS WITH SPINAL DYSRAPHISM

### Hypothesis / aims of study

Upper urinary tract damage due to neurogenic lower urinary tract dysfunction has long been reported as the first cause of death in spina bifida patients. However recent data regarding the causes of death of patients with spinal dysraphism are scarce. The aim of the present study was to assess the current epidemiology of spina bifida in France report the contemporary causes of inhospital death of spina bifida patients

### Study design, materials and methods

We analyzed data from the French national code registry database (Programme de Médicalisation des Systemes d'Information) from 2009 to 2014 to estimate the number of living births of spina bifida patients (using the following combination of CIM 10 codes : "Q05" or "Q76" and "Z38") and the number of inhospital deaths (using the following combination of CIM 10 codes : "Q05" or "Q76" and "discharge=9") and their cause categorized as follows : urological, pulmonary, neurological, digestive, muscular/skin, cardiovascular, skeletal, infectious, cancer, others. The prevalence was calculated by doing the ratio of spina bifida living births over the total number of living births per year based on the Institut National de la Statistique et des Etudes Economiques (INSEE) data.

### Results

The number of spina bifida living births per year ranged from 113 (2009) to 131 (2013) and was stable over the study period. The total number of living births during this period was between 81,1510 (2013) and 83,2799 (2010). The prevalence of spina bifida in France was therefore estimated between 1.3 and 1.6 / 100,000. The number of inhospital deaths of spina bifida patients per year fluctuated between 14 (2012) and 31 (2011) making a total of 138 inhospital deaths over the study period. The leading cause of inhospital death was urological disorders (17%). Other main causes of death were pulmonary disorders (17%), neurological disorders (14%) and bowel disorders (11%).

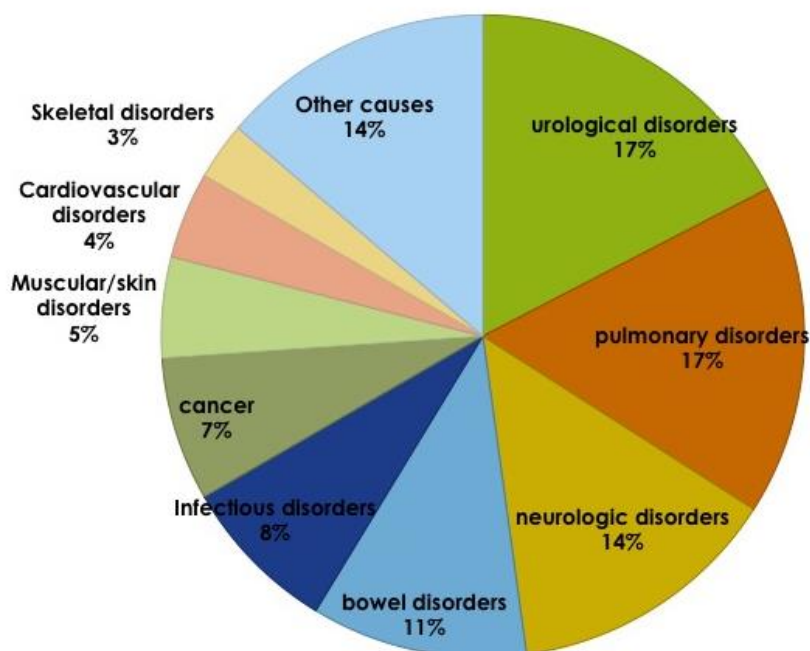
### Interpretation of results

Despit improvement in neurourological management over the past decades urological disorders remain the leading cause of death in patients with spina bifida?

### Concluding message

The current prevalence of spina bifida in France range from 1.3 to 1.6/100,000. Urological disorders remain the leading cause of death in spina bifida patients

### **Causes of inhospital deaths (N=138)**



### Disclosures

**Funding:** none **Clinical Trial:** No **Subjects:** NONE