



#### **Alveolar echinococcosis is increasing in Southern Belgium:**

a report of the Belgian National Reference Laboratory for

Echinococcosis (BNRLE) and clinical experience of ECHINO-Liege

#### Pr Olivier Detry

Service de Chirurgie Abdominale et Transplantation

CHU Liège, Université de Liège, Belgique

olivier.detry@chuliege.be





Alveolar echinococcosis is increasing in Southern Belgium: a report of the Belgian National Reference Laboratory for Echinococcosis (BNRLE) and clinical experience of ECHINO-Liege

O. DETRY (1), C. BIHAIN (2), R. SACHELI (3), S. EGREK (4), N. BLETARD (5), P. MEUNIER (6), P. LOVINFOSSE (7), J. DELWAIDE (8), N. BOTEMBE (9), E. LARRANAGA (10), C. TRUYENS (11), B. DELAERE (12), B. PIROTTE (13), J. GIOT (14), P. LEONARD (14), MP. HAYETTE (3)

[1] Centre Hospitalier Universitaire de Liège, Liège, Belgium, ECHINO-Liege, Dpt of Abdominal Surgery and Transplantation, [2] CHU of Liège, , Belgium, Dpt of Abdominal Surgery and Transplantation, [3] CHU of Liège, , Belgium, ECHINO- Liege, Dpt of Clinical Microbiology, Belgian National Reference Laboratory for Echinococcosis, (BNRLE), , [4] CHU of Liège, , Belgium, Dpt of Clinical Microbiology, Belgian National Reference Laboratory for Echinococcosis, (BNRLE), [5] CHU of Liège, , Belgium, ECHINO -Liege, Dpt of Pathology, [6] CHU of Liège, , Belgium, ECHINO-Liege, Dpt of Radiology, [7] CHU of Liège, , Belgium, ECHINO-Liege, Dpt of Nuclear Medicine, [8] CHU of Liège, , Belgium, ECHINO-Liege, Dpt of Hepatogastroenterology, [9] Centre Hospitalier des Ardennes, Libramont, Belgium, Dpt of Gastroenterology, [10] Erasme Hospital, Brussels, Belgium, Dpt of Infectiology, [11] Université Libre de Bruxelles Faculté de Médecine, Brussels, Belgium, of Parasitology, [12] CHU Dinant Godinne, Yvoir, Belgium, Dpt of Infectiology, [13] CHR Citadelle, Liège, Belgium, ECHINO-Liege, Dpt of Infectiology, [14] CHU of Liège, , Belgium, Dpt of Infectiology, Dpt of Infectiology













### Alveolar Echinococcosis

• First local cases reported in early 2000s



Acta Gastroenterol Belg. 2002 Jan-Mar;65(1):55-60. Acta Gastroenterol Belg. 2005 Jan-Mar;68(1):1-4.









### **ECHINO-Liege**

- Clinicians (Surgeons, hepatologists, infectiologists)
- Radiologist, Nuclear medicine, Pathologists
- Microbiologists
- Veterinarians









## Echinococcose – CHU Liege

- ECHINO Liège
- Echinococcose.be
- Albendazole dosing
- Specific serologies (ELISA, Western Blot)
- PCR & genotyping
- National reference laboratory
- ECHINO-BANK
- Regional, national and international clinical contacts
- Publications in national and international journals
- ECHINO-DAY











### Aims - Patients & Methods

- Review of the cases already known and managed
- Incidence ? National study
- Awarness









#### Results

- 50 patients (28 males and 22 females, mean age: 60yrs, 19-89) living in Wallonia and Brussels regions (+ 1 France and 1 GDL)
- 31 liver resections and 1 liver transplantation







Echin



#### Liver presentation 1









### Liver presentation 2







### Liver presentation 3











### Liver presentation 4







de Liège

















# Annual report



Diagnosed Alveolar Echinococcosis cases In Belgian residents 2015-2022\*



LIÈGE université Médecine



#### Prévalence *E. multilocularis* - Renard roux - Wallonie - Etudes antérieures

2018 – 2022 ( n = 503) 2003 – 2004 ( n = 990) de la Zones agro-géographiques Plateau limoneux Hennuyer Plateau limoneux Brabançon Condroz Hesbaye Pays de Herve Legend Fagne - Famenne Negative Ardenne Ardenne Positive Lorraine Condroz et sillon Sambre et Meuse \*\*\* Fagne-Farnenne-Calestienne Sillon industriel Gaume et Lorraine NEGATIVE Thierache POSITIVE 30 km 1:1000000 nord du sillon Sambre et Meuse (Hesbaye)

Hanosset et al., 2003

Gautier et al., in preparation













#### Prévalence *E. multilocularis* - Renard roux - Flandre (2012 - 2015)

*Echinococcus multilocularis* in red foxes in North Belgium : Prevalence and trends in distribution Jansen *et al.*, 2020, *Veterinary Parasitology: Regional Studies and Reports 22* 



**Fig. 2.** Map showing red fox sample locations in the Flanders region: red and green dots present intestinal samples of foxes sampled in the period 2012–2015, with positive and negative findings for *Echinococcus multilocularis*, respectively. Jansen et al., 2020

#### Prévalence E. multilocularis - Renard roux - Europe



Gottstein et al., 2015, Trends in Parasitology







#### Conclusions

- Alveolar echinococcosis is present in Wallonia
- Early diagnosis allows cure by surgery and 2 years of albendazole therapy
- ECHINO-Liege and the national laboraztory might be contacted to help in the diagnosis and management
- AE incidence might be underestimated









### National retrospective survey

- Retrospective registry lead by the Dpt of Infectiology of Erasme hospital (central EC)
- All hospitals will be interrogated
- Dr Christian Mottet: <u>christian.mottet@hubruxelles.be</u>
- Pr Olivier Detry: <a href="mailto:olivier.detry@chuliege.be">olivier.detry@chuliege.be</a>
- Pr Marie-Pierre Hayette: <u>mphayette@chuliege.be</u>
- www.echinococcose.be







## THANK YOU !



