



Vlaanderen
is zorg

AGENTSCHAP
ZORG & GEZONDHEID

THE STORY OF A SPANISH WILD BOAR

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WIV symposium Infectious Diseases 21/05/2015

FIRST NOTIFICATION



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- > 02/12/2014 17:30: notification to the physician on duty from Care and Health by an infectious disease physician of Gasthuisberg
 - > Possible Foodborn illness by *Trichinella spiralis*
 - 4 patients out of a group of 6
 - 2 in Gasthuisberg
 - 2 in Sint-Truiden
 - Joint dinner (wild boar menu) on 01/11/2014 in restaurant in Borgloon
 - Symptoms:
 - Eosinophilia
 - Inflammatory syndrome
 - Muscle biopsy is planned

SECOND NOTIFICATION



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3/12/2014

> Infectious disease physician Jessa Hospital

- 5 patients with flu-like symptoms (myalgia, headache, fever, generally unwell, peri-orbitaal edema and eosinophilia)



TRICHINELLOSIS



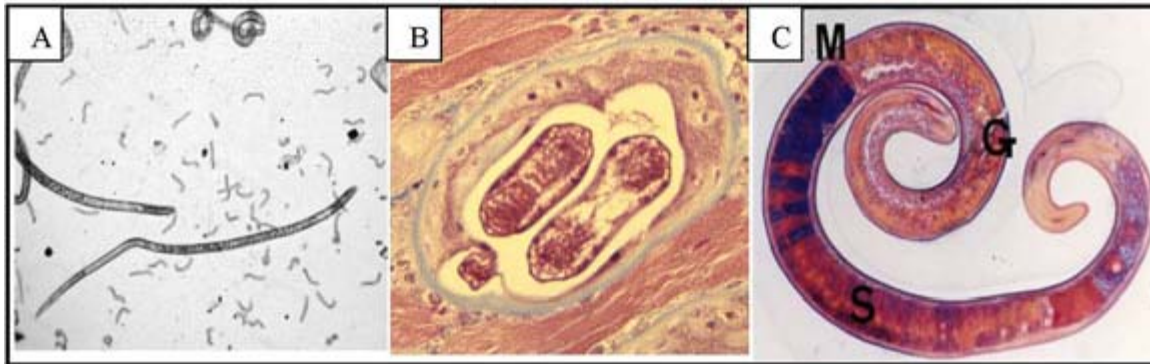
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- > Infectious agent
 - *Trichinella spiralis*, an intestinal nematode
 - 11 different species
 - > Occurrence: Worldwide
 - > Reservoir: carinivorous and omnivorous domestic and wild animals
 - > Incubation period:
 - GI symptoms may appear within a few days
 - Systemic symptoms appear 8-15 days after ingestion of infected meat
 - Depending on the number of parasites 5-45 days

TRICHINELLOSIS



> Mode of transmission

- Consumption of raw or insufficiently cooked meat of animals containing viable encysted larvae
- In the stomach consumed larvae are released from the capsule and invade the epithelium of the small intestine
- They mature into male and female adult worms
- Each female worm can produce 500-1000 new born larvae
- New born larvae penetrate mesenteric lymphatic or venules and disseminate throughout the body and encapsulate in skeletal muscles
- The severity of the clinical picture depends on the number of ingested larvae



TRICHINELLOSIS



> Symptoms

- Intestinal phase: diarrhea, nausea, vomiting, abdominal pijn
- Parenteral or migration phase: eosinophilia, muscle pain, peri-orbital edema, fever, headache, conjunctivitis, ...
- Cardiac and neurological complications appear in the third to sixth week
- Muscle phase: complaints of myalgia and fatigue can last for months or years

> Diagnosis

- Serological testing (eosinophilia and antibodies)
- Muscle biopsy

> Treatment

- Antihelminthics (Albendazol – Mebendazol)
- Corticosteroids

WHAT DO WE KNOW ALREADY



- > 9 patients in 3 different hospitals
- > Common factor:
 - Menu with wild boar



- Consumed between 1/11/2014 – 6/11/2014
- A restaurant in Limburg

WHAT DO WE WANT TO KNOW



- > Are more restaurants involved?
- > Where did the meat come from?
- > Is there still contaminated meat in circulation?
- > Are there still people with similar symptoms by whom the diagnosis is not made?
- > Who do we have to inform?



afbeelding: freeclipart

ACTIONS

AGENTSCHAP
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03/12/2014



> Contact patients by phone

> Contact FASFC



> Information for our colleagues

> Information to Daniël Reynders

Federal Public Service

Head of the General Services International Relations and Public

Health Emergencies

EWRS message



INFORMATION FROM FASFC



- > Trader in Antwerp imports Spanish wild boar
- > Delivery to 6 suppliers who delivered wild boar to restaurants and butchers
- > One of the suppliers in Limburg
- > Long list of restaurants who received wild boar from this supplier between 14/10/2014 and 04/12/2014
- > The two involved restaurants received wild boar from this supplier
- > One restaurant received only one delivery on 24/10/2014
- > Also the other restaurant received a delivery on the same day
- > Lotnumber of this delivery was the most suspected

MEDIA 04/12/2014 AT 4 PM



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- > One of the patients informed a local newspaper
 - > The newspaper asked for more information and published their article the next day
 - > Message: who ate wild boar in November and has or had symptoms as mentioned in the article can contact Care and Health
 - > Because the media were already aware of the news we didn't had time to inform the GPs and hospitals in time

THIRD NOTIFICATION



4/12/2015 5 pm



- > ITM informed the infectious disease control physician of the Province of Antwerp
 - Two friends with symptoms of myalgia, fever, profuse sweating, peri-orbital edema ate wild boar on the sixth of November in a restaurant in Rumst (Antwerp)
 - Serological testing: eosinophilia and antibodies for *Trichinella* species
- > This restaurant was also on the list and received wild boar on 24/10/2014

MEDIA



> Belga Press release on Friday 5/12/2014



> GPs were upset because they were not informed yet

MEDIA CAN HELP TO SPREAD INFORMATION BUT TAKE A LOT OF YOUR TIME



 **HET BELANG VAN LIMBURG**

**HET
LAATSTE
NIEUWS**

vtm
NIEUWS

TVM

vrt



“FEL VERZWAKT EN VIER KILO VERLOREN”

Twee Truienaren in ziekenhuis na eten besmet everzwijn

SINT-TRUIDEN - “We gaan al maar drie keer per jaar uiteten, en dan gebeurt dit”, zuchten Michael Sampermans en boezemvriend Kim Libens uit Sint-Truiden, twee van de elf Limburgers en Antwerpenaars die vorige week in het ziekenhuis behandeld werden nadat ze besmet everzwijn aten. “Het rare is dat Kims vriendin niet besmet raakte, terwijl ik alleen maar van haar vlees proefde”, zegt Michael. De twee, die enorm verzwakten en gewicht verloren, herstellen nu thuis en moeten nog een poos rusten.

achter gekomen dat er in het ziekenhuis van Sint-Truiden iemand lag met exact dezelfde bacterie, die blijktbaar in hetzelfde restaurant was gaan eten.”

Opmerkelijk: ook Kims vriendin Ilona at besmet everzwijn, maar zij kreeg alleen wat buikpijn. “En ik proefde maar een heel klein stukje van haar vlees, maar toch werd ik uiteindelijk ook ziek”, zegt Michael Sampermans.

“Een week na ons restaurantbezoek werd ik draaiërig. Ik had geen koorts, maar wel last aan mijn ogen. Dus ging ik naar de oogarts. Gewoon een infectie, zei die. Maar toen ik later net als Kim 40 graden koorts kreeg, trok ik ook naar het ziekenhuis van Hasselt. Door de communicatie met het ziekenhuis in Leuven, waar enkele slachtoffers lagen, werd de echte oorzaak ontdekt.”

Norbert STAS

Kameraden Michael Sampermans en Kim Libens gingen op 1 november eten bij Mondeveno in Borgloon, een van de twee Limburgse restaurants waar klanten besmet raakten met de parasiet trichinella. “Mijn lief Ilona en ik bestelden everzwijn, Michael en zijn vriendin Patricia vis”, vertelt Kim Libens.

Het vlees was heel lekker, er was niets eienaardigs aan

ACTIONS ON 5/12/2014



- > Set up of a local call centre (> 350 phone calls)
 - Front Office
 - Back Office
- > Mailing GPs and hospitals by our coordination team in Brussels
- > Press release
- > Information to our colleagues of the other communities and Brussels
- > Information to our Minister
- > Information for the public on our website
- > Set up of a phone cascade for the weekend

RESULTS OF OUR SEARCH FOR OTHER PATIENTS



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> We found 5 other patients

- A young couple who ate on the first of November in one of the involved restaurants
- The wife of the owner of one of the restaurants, their waiter and one visitor

PROMED MAIL MESSAGE



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- > 06/12/2014 first message by Dr. Ignace Surmont from Sint Jan Hospital Bruges – Oostende
 - > 13/12/2014 further information by Marjan Van Esbroeck, National Reference Laboratory for Infectious and Tropical Diseases, Institute of Tropical Medicine, Antwerp

SUMMARY

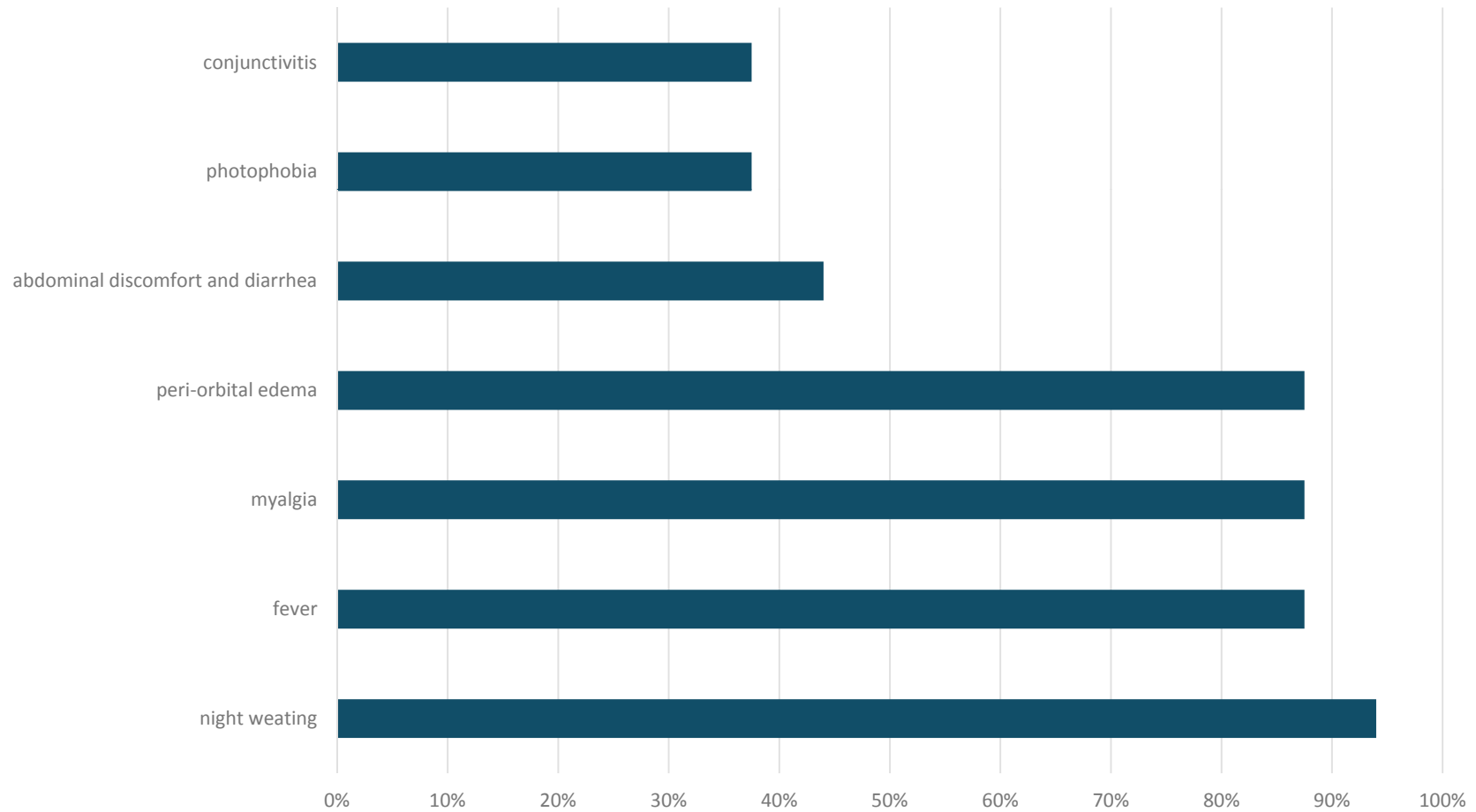


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- > To obtain more correct information we set up a questionnaire
→ all the 16 patients answered
 - > 10 men and 6 women
 - > Average age 38 years (18- 57 years)
 - > They ate between 1 en 6/11/2014
 - > Average incubation period 15 days (6 – 24 days)
 - > 9 were admitted at three different hospitals between 17/11/2014 and 01/12/2014
 - > The diagnosis was made 16 days after the first patient was admitted at the hospital

SUMMARY



Symptoms



SUMMARY



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- > All patients had elevated eosinophilia with an average of 34% (7 – 65%)
 - > In 4 out of 5 patients in whom troponin levels were tested → indication of myocarditis
 - > The diagnosis was confirmed by the Institute of Tropical Medicine in Antwerp (ITM) through :
 - detection of the *Trichinella spiralis* larvae in three muscle biopsies
 - the presence of Trichinella antibodies
 - 6 had already antibodies in the first serum sample between 27/11/2014 and 5/12/2014
 - 10 had a seroconversion of their antibodies

SUMMARY



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- > All patients, but one, recovered well after a treatment with mebendazole (900 tot 1500 mg/day) or albendazole (800 mg/day). Some also received prednisolone
 - > One person had neurological sequelae and stayed in hospital until 19/03/2015

SUMMARY



- > Only 16 patients → a small amount of infected wild boar meat was imported from Spain
- > At the time of the diagnosis there remained no meat that was eaten in the three restaurants between 01/11/2014 and 06/11/2014
- > All samples taken from still present imported wild boar meat from the Spanish slaughterhouse in question were negative for *Trichinella spiralis*
- > 4 persons remained healthy. A paired serologic examination for three of them at 5 weeks and 9 weeks after consumption could not reveal presence of *Trichinella* antibodies.

ACKNOWLEDGMENTS



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- > Dr. Ines Van den Bosch (UZ leuven) and Dr. Peter Messiaen (Jessa hospital)
 - > Dr. Marjan Van Esbroeck and her colleagues (ITM)
 - > The colleagues from the FASFC
 - > Dr. Daniël Reynders
 - > All my colleagues for their support