

# Hepatitis E

## Originator

The causative agent is an RNA virus from the family Hepeviridae (formerly Caliciviridae)<sup>[1]</sup>. It is resistant to the external environment and has several genotypes<sup>[2]</sup>:

- Genotype 1 in Asia and Africa - epidemic,
- genotype 2 in Africa,
- genotype 3 (USA) and 4 (China) also in pigs; may have the character of a zoonosis and cause sporadic cases in humans (including in Europe),
- genotype 5 and 6 in feral pigs,
- genotype 7 and 8 in camels.

## Epidemiology

A rare infection occurs in developing countries with insufficient levels of safe water supply - in Central and East Asia, Africa (and the Mediterranean), Central America. In the Czech Republic, it appears not only as an imported infection. Cases of transfusion transmission are also described.

## Clinical picture

The virus is transmitted by the faecal-oral route. Clinically, it is similar to HAV, but the course is more severe - jaundice is more pronounced, failure is more frequent. In the immunocompetent, it is acute, it becomes chronic only in the immunosuppressed. **It is very dangerous in pregnancy** when lethality during the infection in the 3rd trimester reaches up to 20 %<sup>[3]</sup>. In the rest of the population, lethality is between 0,5 and 4 %<sup>[3]</sup>.

## Diagnostics

By demonstration of anti-HEV and detection of IgG and IgM antibodies. Detection of RNA virus in faeces or blood is possible at the end of the incubation period. It is not fully known whether the infection leaves long-term immunity<sup>[2]</sup>.

## Links

### References

1. International Committee on Taxonomy of Viruses (ICTV). *Virus Taxonomy: 2009 Release* [online]. The last revision 2009-xx-xx, [cit. 2012-01-14]. <<https://talk.ictvonline.org/taxonomy/>>.
  2. ŽAMPACHOVÁ, Eva. *Přednášky a materiály dr. Žampachové ke stažení* [online]. [cit. 2012-01-14]. <<http://mujweb.cz/zampach/motol/?redirected=1521314685>>.
  3. WHO. *Hepatitis E* [online]. The last revision 2005-01-xx, [cit. 2012-01-14]. <<http://www.who.int/?ReturnUrl=http%3a%2f%2fwww.who.int%2fen%2fnews-room%2ffact-sheets%2fdetail%2fhepatitis-e>>.
- HAVLÍK, Jiří. *Infektologie*. 2. edition. 1990. 393 pp. ISBN 80-201-0062-8.
  - LOBOVSKÁ, Alena. *Infekční nemoci*. 1. edition. 2001. 263 pp. ISBN 80-246-0116-8.

### Resources

- PASTOR, Jan. *Langenbeck's medical web page* [online]. [cit. 2010]. <<http://langenbeck.webs.com>>.
- BENEŠ, Jiří. *Studijní materiály* [online]. [cit. 2010]. <<http://jirben.wz.cz>>.
- ŽAMPACHOVÁ, Eva. *Přednášky a materiály dr. Žampachové ke stažení* [online]. [cit. 2012-01-14]. <<http://mujweb.cz/zampach/motol/?redirected=1521314685>>.
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