

TEST DATA SHEET

Test Code and name

TC 0028 *Taylorella equigenitalis* culture, (Contagious Equine Metritis Organism),

Description

The test consists of microaerobic, cultural examination on selective media for a period of 7 days, (14 days for Canada), of swab samples taken from various specified genital sites in mares and stallions, as proscribed by the importing country.

Uses

The test is used as part of the export certification requirements of importing countries which require horses to be certified free from *T. equigenitalis*. The test is also used in the tracing of in contact horses on an infected premises.

Methodology

Swabs must be transported to the laboratory with precautions to avoid loss of viability. The swab must be submerged in Amies charcoal medium and transported to the testing laboratory within 48 hours of collection, preferably in temperature-controlled conditions.

Each swab is cultured in accordance with the OIE, (World Animal Health Organisation), procedure, onto 2 different selective agar media, and a non selective plate to detect strains which may be sensitive to the antimicrobials used. Plates are incubated at 37°C, in an atmosphere containing 10% carbon dioxide, for 7 days, (14 days for Canada) and examined daily.

Specifications and validation

The test is an OIE proscribed test but statistics on sensitivity and specificity are not available. The culture method is regarded as the 'gold standard' method, against which other tests, such as PCR are judged, and is the proscribed method for international trade. Some authorities believe that test mating followed by swabbing of the covered mare may be more diagnostically sensitive than culture from swabs taken direct from the stallion. There are no comparative data available to support this view, only anecdotal reports.

Interpretation

The laboratory report will state that '*Taylorella equigenitalis* was not isolated' and stipulate the incubation period.

A suspect positive isolation will be confirmed by phenotypic tests, including the Monotayl test, a latex agglutination method using polyclonal antibodies to *T. equigenitalis*. A real time PCR will be used to differentiate between *T. equigenitalis* and *T. asinigenitalis*.

If *T. equigenitalis* is confirmed an export certificate will normally be refused and as a notifiable disease the infection will be notified to Defra, who will conduct an investigation to limit the spread of infection and to re-test infected horses after treatment.

Further information

Contagious equine metritis is an inflammation of the endometrium of mares caused by *Taylorella equigenitalis*, which usually results in temporary infertility. It is a non-systemic infection, the effects of which are restricted to the reproductive tract of the mare. The organism is most frequently transmitted by sexual contact with carrier stallions, which are always asymptomatic and in which the principal sites of *T. equigenitalis* colonisation are the urogenital mucous membranes.

T. asinigenitalis is a closely related organism, isolated from 3 donkey jacks in the USA but as yet has not been isolated from naturally infected horses, and its pathogenicity for horses is uncertain.

The UK is regarded as CEM-free. Occasional outbreaks are usually associated with imported horses.

VLA's Laboratory at Bury St Edmunds is an OIE, CEM reference laboratory. The OIE methods manual is now on line. The CEM chapter, which provides more detail of sampling and cultural methods can be viewed at http://www.oie.int/eng/normes/mmanual/2008/pdf/2.05.02_CEM.pdf

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