|  |  |
| --- | --- |
| Logo AGES | |
| Brucella ovis | |
|  |  |
| 09.05.2025 14:37 Uhr | |

**Brucella
ovis**

**Brucella
ovis**

Last
change:
10.10.2023

**Profile**

Infections
with
the
bacterium
*Brucella
ovis*
cause
inflammation
of
the
testicles
and
epididymis
in
rams.
Humans
cannot
contract
this
bacterium.

**Occurrence**

Almost
worldwide
in
all
sheep-rich
regions

**Host
animals**

Sheep,
deer

**Infection
route**

Transmission
occurs
via
direct
contact
(droplet
infection)
from
infected
ram
to
ram
or
indirectly
during
mating
via
female
sheep.
After
colonization
of
the
kidneys,
excretion
can
also
occur
via
the
urine.

**Incubation
period**

3-17
weeks

**Symptomatology**

In
rams,
unilateral,
rarely
bilateral
epididymitis
occurs.
In
pregnant
ewes,
abortions
and
increased
lamb
mortality
may
occur.

**Therapy**

A
specific
therapy
is
not
possible.
Infected
bucks
should
be
excluded
from
breeding
or
the
herd
as
soon
as
possible
and
the
herd
as
well
as
contact
animals
should
be
clinically
and
serologically
examined.

**Prevention**

*B.
ovis*
is
generally
introduced
into
a
flock
via
infected
sheep
or
semen.
For
this
reason,
clinical
examination
(palpation
of
the
scrotum)
and
serological
screening
(detection
of
antibodies)
of
potential
breeding
rams
or
rams
with
unknown
health
status
prior
to
introduction
into
the
flock
are
the
most
important
preventive
measures
against
the
spread
of
the
pathogen.
Infections
in
ewes
can
be
prevented
by
controlling
*B.
ovis*
in
rams.

**Situation
in
Austria**

Individual
cases
occur
only
sporadically.
Appropriate
monitoring
and
control
programs
are
in
place.
Positive
rams
must
be
excluded
from
breeding
by
slaughter
or
castration
and
the
affected
herd
must
be
re-examined.

**Specialized
information**

The
reservoir
for
*B.
ovis
infections*
is
chronically
infected
rams.
The
pathogen
may
persist
in
testes,
epididymis
accessory
gonads,
or
kidneys
and
be
shed
intermittently
for
years.

After
mating
with
an
infected
ram,
the
pathogen
can
survive
in
the
vaginal
secretions
of
the
female
sheep
and
be
transmitted
to
an
uninfected
ram
during
the
next
mating.
Females
usually
shed
the
pathogen
after
a
few
months,
thus
contributing
only
temporarily
to
further
spread
in
the
flock.
Abortions
or
the
birth
of
weak
lambs
due
to
placentitis
of
the
infected
ewe
occur
rather
rarely.
Young
rams,
even
though
they
have
not
yet
been
used
for
mating,
can
become
infected
from
infected
rams
through
social
interaction
in
the
ram
flock
(sniffing
urine
or
semen,
or
ranking
fights
with
rectal
copulation).
Rams
from
flocks
of
unknown
status
should
not
be
kept
with
other
rams
or
used
for
breeding.
Ewes
recently
mated
by
infected
rams
pose
a
potential
risk
of
infection
to
healthy
rams.

**Symptomatology**

The
majority
of
*B.
ovis
infections*
are
asymptomatic
or
changes
(genital
lesions)
do
not
become
clinically
apparent
until
a
late
stage
of
infection.
Aries
become
clinically
conspicuous
by
unilateral,
rarely
bilateral,
palpable
changes
of
the
epididymis
(epididymitis).
Economic
loss
due
to
alteration
of
breeding
parameters
in
the
flock
is
often
only
visible
in
intensive
sheep
farming.

**Diagnostic**

Indirect
methods:

* Serological
  detection
  of
  *B.
  ovis
  antibodies*(ELISA,
  complement
  fixation
  reaction).

Direct
methods:

* Bacteriological:
  culture
  test
  from
  organ
  material,
  semen
  or
  swab
  samples
  on
  selective
  media.
* Molecular
  biological:
  genome
  detection
  by
  PCR

**Contact**

**National
reference
laboratory
for
Brucella
ovis**

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**More
contacts**

**More
contacts**

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