

Relevant questions in Veterinary Medicine: which studies need priority?

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EBVM: WHICH AREAS NEED PRIORITY

EBM is its early stages in veterinary medicine. At this moment, most important initiatives are:

- Spreading the concept among clinicians:
EBM is not a sophisticated practice for academicians
- Increasing the access of practitioners to published evidences
- Encouraging clinical studies of quality (randomized, controlled, blinded) and translational research

Spreading the concept among clinicians

- 1. Workshops and seminars (like this one) should be organized by scientific societies for practitioners**
- 2. EBM should part of the curricula of the European Veterinary Schools**
- 3. Examination for the European Specialist Diploma should make emphasis in EBVM. Diplomates are the main opinion-leaders in veterinary medicine**

Spreading the concept among clinicians (II)

- 4. Organizers of CE courses should try avoid the non-evidence based approach (which, by the way has an extraordinary success ...) and encourage the EBVM in the lectures**
- 5. Veterinary journals should include EBVM review papers, as Veterinary Dermatology does since 2004**

Increasing the access of practitioners to published evidences

- 1. Scientific and professional societies should facilitate the access of practitioners to good journals (not to secondary sources)(Ex. SCIVAC)**
- 2. There is a need for a database of information as**



The Cochrane Library

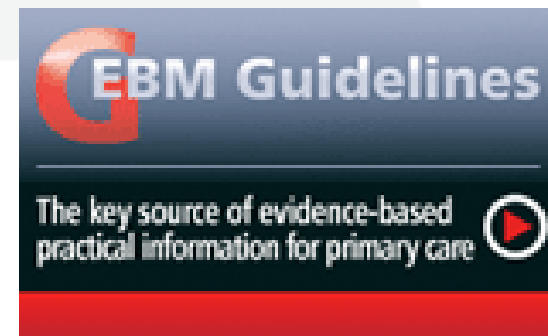
Evidence for healthcare decision-making



The Cochrane Library

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Encouraging clinical studies of quality (randomized, controlled, blinded) and translational research

- 1. There is an alarming lack of solid evidences studies/trials in veterinary medicine**
 - Ⓢ Without good studies (evidences) it is impossible to practice EBM**
 - Ⓢ Reviews of therapies based in a few non randomized studies can produce misleading results (theory of the “minestrone” de Fabia)**

Encouraging clinical studies of quality (randomized, controlled, blinded) and translational research (II)

2. Contrarily, there is a proliferation of:

- CE courses/lectures without the EBVM approach**
- Publications of single case reports or short series of cases (non-controlled)**
- Publications of basic research that never reach the clinical use (Ex. Neoplasia markers)**
- Alternative non-validated therapies ... /...**

Ex. : Neoplasia markers

- ⊙ **Between 1997 and 2002 over 20 neoplasia markers were investigated, published and proposed as useful for the therapy/prognosis of neoplasia in animals**
- ⊙ **Most studies were immunohistochemical studies done by pathologists (PCNA, p53, cox-2,...)**
- ⊙ **So far, none of these markers has been tested in a clinical trial; but new markers are non-stop being published, sometimes by the same research teams**

A proposal of priority areas

1. Common diseases and healthcare procedures in companion animals (EBVM is not for “rare diseases” and for the “top specialists”)

- Ⓢ Immunization procedures
- Ⓢ Nutritional care (nutraceuticals, supplementations,...)
- Ⓢ Sterilization (advantages, side effects, risks, techniques...)
- Ⓢ Degenerative joint disease

2. Diseases with impact in human health

- Ⓢ Classical infectious/parasitic zoonosis
- Ⓢ Bites (aggressiveness to human-beings)

A proposal of priority areas (II)

3. Diagnostic methods

- ② **Most diagnostic methods in veterinary medicine have not been validated (also in medicine there is a lack of validation of diagnostic techniques: only 5% of studies in Cochrane Library)**
- ② **Evaluation it is not only to determine accuracy (specificity and sensibility)**
- ② **The final question is whether tested patients fare better than similar untested patients**
- ② **This usually requires a controlled randomized trial and long – term surveillance**

Evidence based diagnostics

Christian Gluud, Lise Lotte Gluud (2005), BMJ

Four phases in architecture of diagnostic research

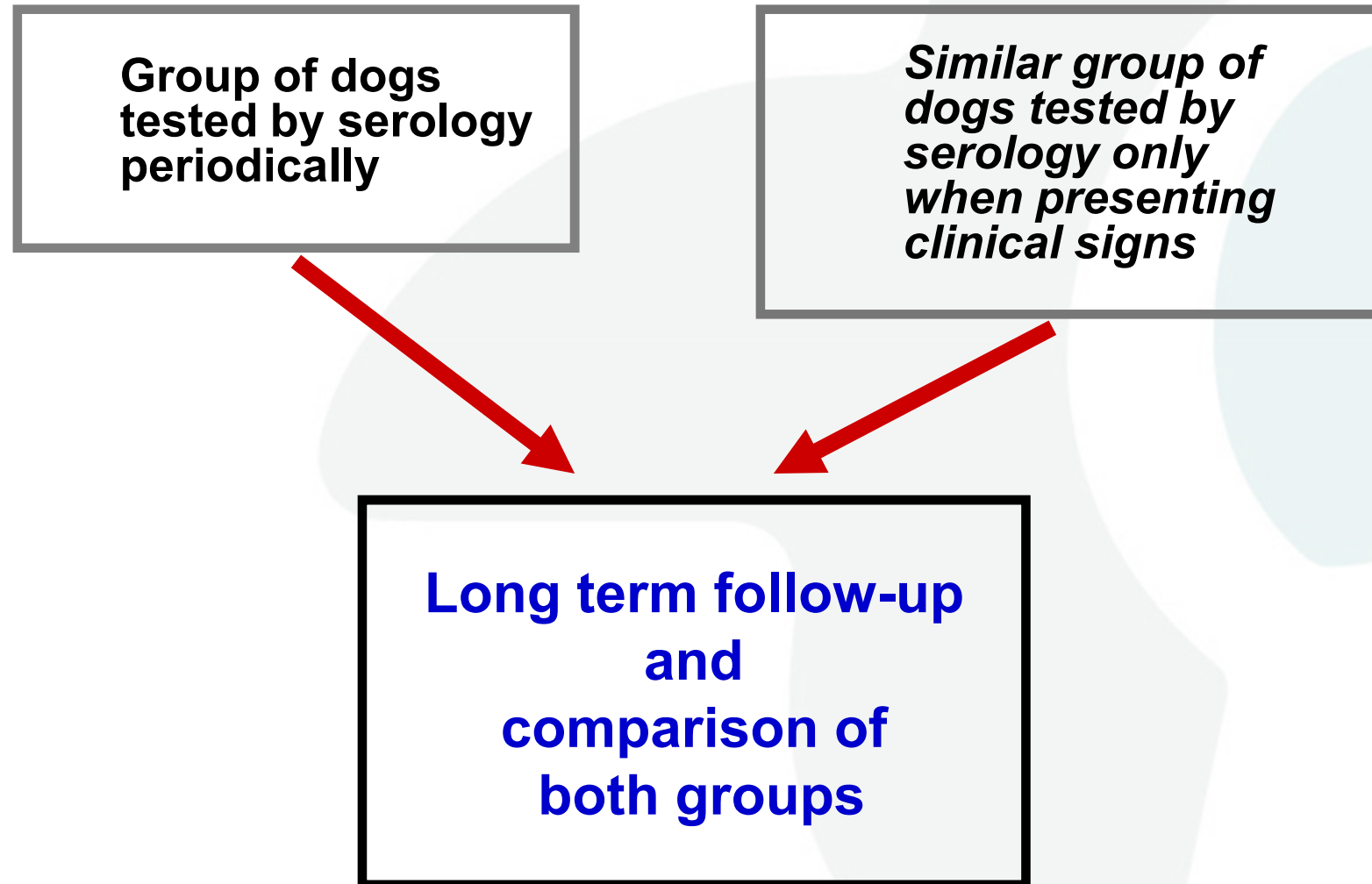
Phase I—Determining the normal range of values for a diagnostic test through observational studies in healthy people

Phase II—Determining the diagnostic accuracy through case-control studies, including healthy people and (a) people with known disease assessed by diagnostic standard and (b) people with suspected disease

Phase III—Determining the clinical consequences of introducing a diagnostic test through randomised trials

Phase IV—Determining the effects of introducing a new diagnostic test into clinical practice by surveillance in large cohort studies

Serological *screening* in canine leishmaniosis



A proposal of priority areas (III)

4. Alternative therapies/medicines

- ④ Acupuncture
- ④ Homeopathy
- ④ Naturopathy, holistic medicine

To end, a few encouraging examples....

1. Publication of EB consensus and guidelines regarding important canine & feline diseases:

- ② IRIS (Renal Disease)
- ② Atopic dermatitis
- ② Ehrlichiosis, borreliosis, leishmaniosis...

2. Increasing publication of EB-reviews:

- ② Veterinary Dermatology
- ② Veterinary Clinics of North America (vol 37, 2007, devoted to EBVM)



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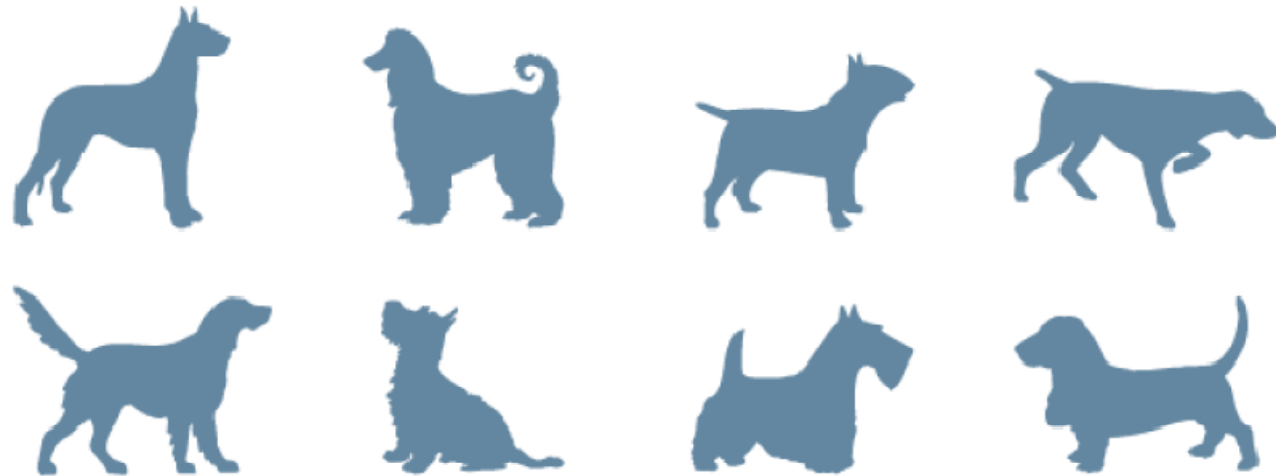
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