

The consultation process and responsibilities of a veterinarian

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1.1

Introduction – What is meant by an ‘integrated’ consultation process?

A thorough consultation process will provide the opportunity for maximum impact on that animal’s life. Whilst obtaining the most likely diagnosis, diligent communication with the owner also increases the likelihood that the long-term welfare of that animal will improve through good management and prevention principles (Figure 1.1.1).

Consider the following three aspects of the animal’s life:

Past	‘What has happened in this animal’s life up until now?’
Present	‘How can I help this animal at this moment?’
Future	‘How can I make a long term, sustainable difference to the welfare of this animal?’

Why is it important to conduct an integrated consultation?

The animal is the primary stakeholder, but ultimately the owner is the stakeholder who can make the biggest positive difference to that animal throughout its lifetime – good communication is essential.

The diagram below (Figure 1.1.1) shows the links between animal, owner and veterinarian. At the junction of various stakeholders, aspects for the consultation process can be seen; these link to the three phases of the animal’s life – past, present and future.

Ultimately all phases lead to the central goal of improving the welfare of the animal.

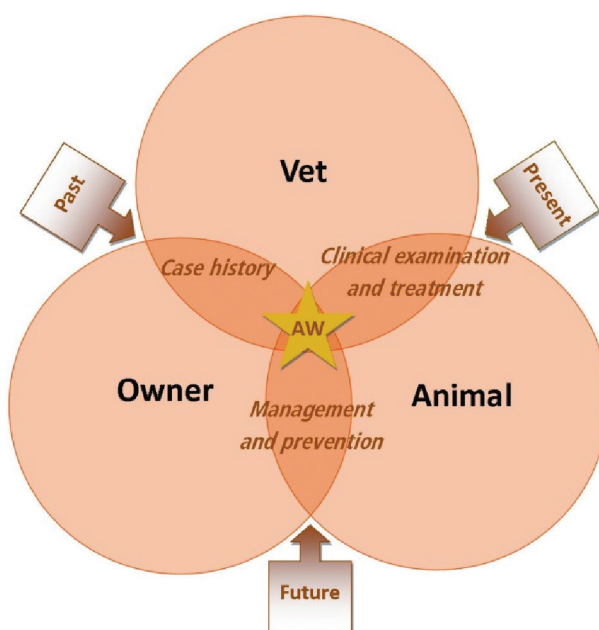


Figure 1.1.1 An Integrated Consultation Process is the complete interaction between animal, owner and veterinarian. (AW = Animal Welfare)

The responsibilities of an animal health provider

1.2

Working equine veterinarians are accountable to the animals, to owners/communities, to the profession, and to society.

This section outlines five main competencies expected of working equine veterinarians:

1. Animal welfare advocate	4. Clinical governance
2. Veterinary expert	5. Lifelong learner and trainer
3. Communication	

1. Animal welfare advocate

As a veterinarian, act as an animal welfare advocate at all times, ensuring the following:

- Welfare-friendly consultation process Practical application of the five freedoms relating to handling, restraint, distress and pain (Korte et al. 2007). For a full description of the five freedoms see Section 2.1.
- Accurate diagnosis and treatment following diagnostic procedure, with correct drug and treatment choice.

In all cases, ensure that the benefit outweighs the harm caused to the animal through appropriate technique or treatment choice (Figure 1.2.1).

2. Veterinary expert

- Integrate medical knowledge, professional attitudes and clinical skills under the principles of evidence-based veterinary medicine.
- Always make the best choice of treatment available for the condition in that individual animal.
- Ensure best practice at all times in the areas of technical veterinary skills, preventive medicine, therapeutic medicine, population medicine and clinical pathology (Figure 1.2.2).



Figure 1.2.1 In decisions with working equids ensure that benefit outweighs harm.



Figure 1.2.2 Veterinary skills, knowledge and attitude are all equally important.

1 THE CONSULTATION PROCESS AND RESPONSIBILITIES OF A VETERINARIAN

3. Communication

The owner and community should be the first point of contact (Figure 1.2.3).

Avoid examining an animal before interacting with the owner/community if at all possible.

- Good communication with all parties involved in the care of the animal
 - explanation of treatment and follow-up/nursing
 - management and prevention advice to ensure long-term improvement in animal welfare.
- Safety Ensure people and animals do not get hurt.
- Drugs
 - good instructions to the owner on handling and responsible storage
 - proper labelling of prescribed medicines.



Figure 1.2.3 The owner and community are the first point of contact.

4. Clinical governance

- Record keeping This provides accountability, monitors the efficacy of treatment and directs drug procurement choices.
- Registration It is **mandatory** that all veterinarians are registered with the veterinary body of their country (and often state/territory/province). Although the requirements differ between countries, compliance with veterinary notifications is non-negotiable. The same applies for paraprofessionals; they must abide by the laws of their country.
- Dispensing of drugs All veterinary procedures should have minimum standards for drug prescription and dispensing. It is the responsibility of the veterinarian to **set an example to other stakeholders** regarding responsible use of medicines to ensure that resistance and poor compliance is not perpetuated (more information in Chapter 5 Medicines).
- Biohazard waste and carcass disposal Ensure equipment is always clean and/or sterilised and that needles, syringes and drugs are effectively stored and disposed of correctly (Figures 1.2.4 and 1.2.5). Carcass disposal should adhere to local laws and, if buried, waste matter must be deep enough so that other animals will not be able to gain access. Ensure post-mortem/euthanasia areas are always cleaned appropriately. Ideally there should be a clearly outlined protocol describing the disposal procedure in order to aim for the responsible and legal disposal of waste.



Figure 1.2.4 Correct disposal of used needles and syringes.

Ensure a clean working environment.



Figure 1.2.5 Correct disposal of a used fluid bag.

5. Lifelong learner and trainer

It is the responsibility of a veterinarian to keep up-to-date with recent advances in veterinary knowledge. This can be achieved in a number of ways, including being a learner and a trainer of others:

- private study/reading
- attending conferences or lectures
- professional discussions with colleagues
- distance learning (webinars, e-modules)
- practical training sessions as either a trainee or a trainer
- research
- studying for a qualification

1.3

Taking a good, complete history

Taking a good history is a skill that requires practice and development.

Direct and indirect questions

History questions should be asked with care, so that the answer given will help with the diagnosis. Questions can be asked either directly or indirectly, depending on what information is sought and the clinician's relationship with the owner (Figure 1.3.1).

1 Indirect questions These are usually predominant at the start of a consultation, help to establish rapport with the owner and relax the animal prior to examination. Indirect questions help to reveal facts about the illness/treatment which the owner may not wish to disclose. The same question may need to be asked in a number of different ways to establish the whole story. However, be careful the owner does not become frustrated.

2 Direct questions (different from 'leading' questions) Often specific technical information is required to help obtain the correct diagnosis although the owner may not understand unless asked explicitly. The following scenario is a common example of an occasion when only a direct question can elicit the correct information:

Vet: 'Is your horse passing faeces/droppings?'

Owner: 'Yes.'

However, the owner does not necessarily know normal faecal amount and consistency so something may be missed if specific questions are not asked. It is the clinician's responsibility to elicit exactly the information required. For example:

Vet: 'Does your horse show signs of diarrhoea?' or 'What consistency and colour are the faeces?'; and 'How often are faeces passed?'

Questions such as these help to determine the exact behaviours and clinical signs the animal is showing. It takes a little longer but will ultimately help with diagnosis.



Figure 1.3.1 Taking the time to listen to the owner demonstrates care. Clinicians must ensure they record this information to maintain good clinical records.

Taking the time to listen to owners demonstrates care. They are more likely to trust the clinician's skills and listen to advice if they feel they have been listened to.

Considerations when taking the history from an owner

- Avoid scientific words the owner may not understand.
- Avoid questions that will 'lead' the owner to answer in a particular way: 'Is there a nasal discharge?', if so 'What colour is it?' is preferable to 'Have you seen a yellow nasal discharge?'

Misleading histories are common. Owners often have their own diagnosis in mind, or do not want to admit how long their animal has had a problem.

- If in doubt about what the owner has told you, ask the same question in a different way later on in the consultation. Getting an owner to describe the symptoms that have been noticed can be helpful. For example, if the owner has noticed a nasal discharge, having the owner describe the appearance and volume of this may be helpful and is not leading in any way.
- Try to learn and understand the local or traditional names of diseases, equipment, etc.

What questions should be asked?

Here are some examples of initial information that might be requested:

- Signalment – age, sex, work type, pregnancy status, breeding history
- Length of time the owner has had the animal and history of previous illness
- Living arrangements – bedding, shelter, other animals kept together
- Feed – appetite, quantity/quality of food, frequency, food type, difficulty eating (quidding), faeces (appearance and amount)
- Water – thirst, quantity/quality of water, frequency, difficulty swallowing, urine appearance and amount
- Work pattern – lameness, weakness, or loss of vigour and for how long. New or increased work activities for the animal
- Breathing – discharge from eyes/nose, coughing, wheezing, tiredness
- Abnormal behaviours

Once a good understanding of the animal's life and general signs has been gained then ask more specific questions about the presenting problem:

- Why did the owner present the animal?
- When did the problem start? Was there a specific incident that started it?
- Is the problem getting better, worse, or staying the same?
- Are any other animals affected?
- Has there been any treatment already given? If so, who administered it, what did they give and for how long/how many times? What was the response of the animal to this treatment?

1.4

The clinical examination process

A good clinical examination, when coupled with a good history, helps formulate an idea of the most likely diagnosis. Developing communication skills is central to good veterinary practice.

'I can see the problem, it's obvious...'

Even so, it is good practice to do a full clinical examination, providing the opportunity to:

- pick up other problems
- bond with animal and owner
- assess improvement over time
- speak with the owner about husbandry issues while you are working
- demonstrate care.

Things are not always what they seem – a skin lesion may indicate underlying liver disease; weight loss may be a sign of dental disease.

Initial observation of the animal – No hands

Always observe the animal from a distance to start with (Figure 1.4.1). This can provide some interesting information that would be missed by starting the physical examination too soon and gives initial clues to inform the diagnostic work-up.

While taking a history, always watch the animal, taking into account the following:

- Temperament/demeanour
- Body condition
- Stance
- Head position
- Symmetry/limb conformation
- Swellings
- Shifting of weight
- Breathing abnormalities
- Signs of pain
- Hair loss or scabs

Observe from the **front, rear and both sides**, if possible, so as not to miss anything on initial examination (Colahan et al. 1999).

Offer water (Figure 1.4.2) – this is the most reliable way to diagnose and treat dehydration in adult working horses (Pritchard et al. 2008).



Figure 1.4.1 Observe the animal from a distance initially.

Compare and contrast what the animal looks like with what the owner is describing. How well does the information from both sources fit together?

When carrying out the clinical examination it is always useful to complete the exam in a logical order so that nothing is missed out.

A logical order may be starting at the nose and finishing at the tail, or working through each body system one at a time. With practice a systematic approach can be developed.

The approach described below starts from the head:

Head and neck

1 Mucous membrane colour indicates the level of tissue oxygenation and perfusion of the capillary bed. Severe disturbances will induce a colour change, even when a haemogram is normal. Look inside the mouth, nostrils, or eyelids (see Chapter 9 Ophthalmology). For the mouth, insert a thumb or finger into the corner of the lips and lift the top lip until the gums are visible. Ignore the darker line immediately around the base of the teeth. Abnormal colours are pale/white, yellow, red, or purple. Each of these changes can be significant, so it is important to assess in conjunction with other clinical signs (see Table 1.4.1).



Figure 1.4.2 Offer water to assess hydration status as well as to provide one of the five freedoms (Pritchard 2005, Korte et al. 2007).





Appearance			
			
Colour			
Pale pink	Pale/white	Dark red/purple 'Injected'	Yellow or 'icteric'
Possible Indications			
Normal	Pain, anaemia (gastrointestinal disease; parasitism: Al-Saad 2009), shock, haemorrhage (Wilson et al. 2003), chronic disease	Endotoxaemia, severe pathology (severe prognosis: Ihler et al. 2004)	Anorexia, liver disease, piroplasmiasis (babesiosis - see Chapter 17) (bilirubinaemia: Al-Saad 2009)

Table 1.4.1 The range of mucous membrane colours with their interpretation relating to disease status.

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2 Capillary Refill Time (CRT) CRT measures the degree of peripheral perfusion, thus indicating the strength of blood flow to the extremities. Press firmly on the gum until it goes pale under the finger, then release and count how many seconds pass before normal colour returns to the area. Normal CRT is 1-2 seconds. CRT is prolonged with decreased peripheral perfusion e.g. shock.

3 Pulse Feel the pulse from the mandibular artery – note strength, rate and regularity (Figure 1.4.3). Pulse can be taken before opening the mouth which may distress the animal.

4 Nostrils Discharge can indicate upper or lower respiratory tract infection or inflammation and is always significant even if very little. The colour can range from clear (usually indicating viral or allergic condition) to blood-tinged or yellow/green, which is more likely indicative of bacterial infection. Smell can indicate infection of the nasal passages, sinuses, guttural pouches, or the lower respiratory tract. Also feel for inequality of air flow or asymmetry between the two sides.

5 Eyes Always take time to examine the eyes as they can provide useful information both on health status and on husbandry practices:

- discharge – colour, consistency, amount
- conjunctivae – colour, inflammation, foreign bodies
- third eyelid – apply digital pressure to the eyeball via the upper eyelid to view this. Look for protrusion, swellings, petechiae, or granulation tissue.
- cornea – opacities, ulcers, or evidence of a previous ulcer that has healed, often detected by a white plaque on the eye and opacities
- globe – signs of recurrent uveitis, colour changes, opacities, or cataracts (see Chapter 9 for more detail on the ocular examination procedure).

6 Ears Always stand in front of the animal to assess head symmetry. A tilt to one side could indicate a problem/pain in the ear on that side. Look for signs of external damage, scratching, wounds, or discharge.

7 Incisor teeth (See Table 1.4.2) Inspect briefly at this stage, since the incisors can give a preliminary indication of age and function of the alimentary system. An estimation of the age of the animal can also help shape the list of differential diagnoses. For example, younger animals are often prone to injury, ingestion of inappropriate substances (foreign objects, plastic bags), toxicities and acute contagious viral or bacterial infections, whereas older animals are more likely to have chronic conditions such as arthritis, systemic diseases involving organs (such as liver and kidney), or tumours. (See Chapter 10 The teeth for more information on the ageing process.)



Figure 1.4.3 Palpation of the pulse from the mandibular artery.

Remember the eruption times of the incisor teeth of donkeys has been reported as later than that of horses by up to one year (Muyile et al. 1999); the presence of hooks and Galvayne's groove for ageing are unreliable in donkeys.




View of incisor teeth			
Interpretation and estimation of age	0-5 years: Temporary teeth exist, rounded at the junction of the gum line	6-15 years: Elongated tables, angle straighter when viewed from the side	16+ years: 'Peg' like, sharper angle when viewed from the side

Table 1.4.2 Estimating the approximate age of an equid by examining the incisor teeth.

8 Submandibular lymph nodes Palpate between the rami of the mandibles and in the region of Viborg's Triangle (borders are vertical ramus of the mandible rostral, tendinous insertion of sternomandibularis muscle dorsal and linguofacial vein ventral) to determine whether the lymph nodes are enlarged. Lymph nodes will be hot and painful if abscessed, or there may be fibrosis if the animal has had Strangles (*Streptococcus equi* var. *equi*) previously. This could be significant if there are systemic signs which could indicate Bastard Strangles (see Chapter 12).

Thorax

Heart (pulse) and respiratory rates are most accurate if taken at rest when the animal is calm.

Pain is an important factor that can have an effect on these indicators.

1 Auscultation of the heart Primary heart disease is uncommon in equids compared to other species. Signs of cardiovascular disease include ventral oedema, prominent jugular pulse (when the head is raised) and altered respiratory rate and effort. Listen to the heart for at least 1 minute on both sides as this allows time for the heartbeat to settle if the animal is nervous. Note regularity of the heartbeat and any murmurs (Figure 1.4.4).

2 Auscultation of the lungs Auscultate both right and left lung fields in at least four places each side, taking in both dorsal and ventral areas of the lung field. Listen for both rate and effort; lung sounds should be clear and the animal should not show any signs of increased effort.

Note the large size of the lung fields as depicted by the triangle in Figure 1.4.5. The borders are as follows: a caudoventral line from the 17th intercostal space level with the tuber coxae, past



Figure 1.4.4 Auscultation of the heart with recording of heart rate in a horse.

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the 11th intercostal space level with the point of shoulder, to the point of the elbow; cranial border is the scapula/shoulder; dorsal border is the epaxial muscles/thoracic spinal transverse processes (Colahan et al. 1999).

Listen for crackles, wheezes, or evidence of fluid in the lungs (see Chapter 12 for details).

Remember to listen for abnormalities in the tracheal and laryngeal areas too in case of upper respiratory tract disease (Figure 1.2.2).



Figure 1.4.5 Area of lung fields depicted by outline of white tape.

Reported values for the heart and respiratory rates of working horses, donkeys and mules are shown in Table 1.4.3. Adult horses and mules show similar values for resting heart rate (29–41 beats per minute), whilst donkeys and foals may show higher values (up to 60 beats per minute for donkeys and over 100 beats per minute for foals); resting respiratory rate for adult horses and mules may range from 8 to 28 breaths per minute and up to 40 breaths per minute in donkeys.

What is a 'heaves' line and how is it significant?

A 'heaves' line is a sharp demarcation of the abdominal muscles along the lower border of the lung fields (Figure 1.4.6), indicating that the animal has been taking deeper 'abdominal' breaths over a period of time. Presence of a heaves line is most likely due to a chronic respiratory condition where the lung capacity is decreased, thus the animal needs to take deeper breaths in order to get enough oxygen for circulation.



Figure 1.4.6 Heaves line seen in a horse.

Abdomen

Auscultate the abdomen in at least four areas on both the right and left sides.

Auscultate from the caudal edge of the ribs, from the paralumbar fossa to the ventral abdomen (see Figures 1.4.7, 1.4.8 and 1.4.9). Even if the animal is not presenting with colic, it is important to listen in case of abnormalities, either increased or decreased sounds (White and Edwards 1999).

Listen for sounds associated with the ileocaecal valve in the area of the right paralumbar fossa. This classically sounds like 'water down a drainpipe' and there should be about 1–3 per minute; absence of this noise is significant (Colahan et al. 1999). It is important to be able to know whether the gut sounds are normal, increased, or decreased. See Chapter 11 for gastrointestinal problems.

Confidence in lung or abdominal auscultation can only increase by listening to many different animals over time, thus building up a picture of the range of normality.

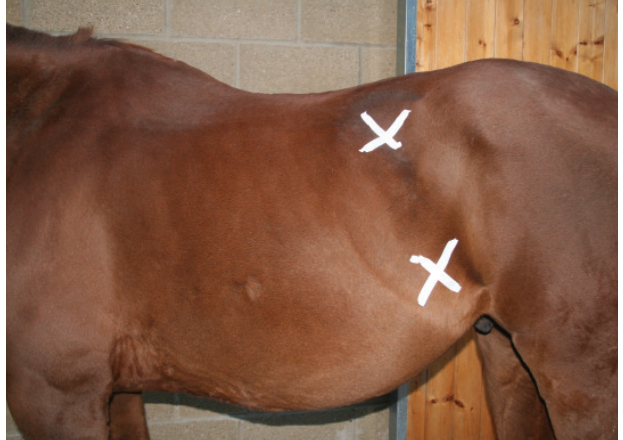


Figure 1.4.7 The white crosses indicate focal areas for auscultation of the left paralumbar fossa (upper) and left ventral abdomen (lower). However, it is good practice to auscultate over a wide area of the abdomen.

Always consider the safety of the handler, the animal and any other persons present. Ensure safe positions for all and responsible, welfare-friendly handling at all times. If the animal is unhappy with any examination procedure allow more time to relax and try again.



Figure 1.4.8 Auscultation of the abdomen at the left paralumbar fossa.



Figure 1.4.9 Auscultation of the abdomen at the left lower flank region.

Urogenital system

Examine briefly for evidence of swelling, discharge, or injury. Do not forget to look at the mammary glands in females, especially if nursing (see Chapter 13 for more details).

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Musculoskeletal system

A brief assessment of the musculoskeletal system is ideal in all cases, even if it is not the presenting problem, as so many welfare issues stem from an incorrect gait (Pritchard et al. 2005, Broster et al. 2009).

A specific lameness examination is covered in Chapter 14; however, it is important to note any swellings, lumps, or gait abnormalities (Figure 1.4.10).

In the hindlimbs the hock is a common site of chronic lameness. Assess hindlimb symmetry and whether there is atrophy of major muscles such as the gluteals. The forelimbs often show evidence of swelling below the carpus in working equids, particularly of the flexor tendons, and lower limb joint swelling (Broster et al. 2009).

Assess the hoof walls for signs of cracking and wear which may indicate poor hoof quality or poor hoof management. Look over the soles of the feet to check for any foreign bodies, bruising, or smell which may indicate an infection such as thrush. Assess the condition of the frog and the quality and state of wear of the shoes, if present.



Figure 1.4.10 Examine the gait for lameness.

Rectal temperature

Body temperature is referenced as a range around the physiological normal value and has an acceptable deviation by 0.5–1.0 degree either side depending on age, weather, working conditions and other effects such as showering or drugs.

Remember: one parameter alone (e.g. temperature) will not give the full story; put the whole picture together to make an accurate assessment.

Reported values for rectal body temperature of working horses, donkeys and mules are shown in Table 1.4.3. The temperature range does not vary more than 1.5 degrees from 37.5°C; however, foals, especially newborn, may have temperatures as high as 39°C.

How to take the rectal temperature:

1. Shake/flick the thermometer until the mercury falls down to the bulb (with a digital thermometer this is not necessary).
2. Lubricate the bulb (vaseline, jelly, or water).

3. Slide bulb gently into and along the side of the rectum, avoiding insertion into faeces which results in an inaccurate reading.
4. Wait at least 60 seconds (or until the beeping sound with a digital thermometer).
5. Remove thermometer gently and keep it horizontal whilst reading the temperature.

N.B. Note the correct positioning of the examiner's body is close to the animal at the side of the hindquarters (Figure 1.4.11), reaching around to the rectum; neither the safety of the person nor the animal's welfare is compromised.

Always consider the welfare of the animal, correct calm handling and good technique. Do not continue if there is a risk to human or animal safety.

Summary

With all the findings from the clinical examination, start creating a list of differential diagnoses, or identify further examination or diagnostic tests to aid diagnosis.



Figure 1.4.11 Safely taking the rectal temperature of a horse.

Reported values

	Heart (pulse) rate (beats per minute)	Respiratory rate (breaths per minute)	Rectal temperature (°C)	Reference
Horse (adult resting)	Range 20–80 (mean 38.2)	Range 12–60 (mean 31.5)	Range 33.5–39.6 (mean 36.6)	Upjohn 2013 (personal communication): 852 apparently healthy working horses from Lesotho
Donkey (adult resting)	38–48 39–56	14–26 21–42	36.0–38.3 36.6–38.0	Lemma and Moges 2009: 85 working donkeys from Ethiopia Canacoo et al. 1991: 27 apparently healthy donkeys from Ghana
Mule (adult resting)	29–37	8–16	37.1–38.1	Ali and Anjum 1998: 700 mules from 7 farms over 3 regions of Pakistan

Table 1.4.3 Reported values for heart, respiratory rates and rectal temperature of healthy working horses, donkeys and mules.

1.5

Formulate a list of differential diagnoses

Think about the following list of potential causes of illness, disease or injury. By comparing the history and clinical signs, a clinician can identify which are the most likely possibilities for the case presentation and define a list of differential diagnoses according to the primary cause(s):

- Developmental, degenerative (e.g. arthritis)
- Allergic
- Metabolic (e.g. hypocalcaemia)
- Neoplastic
- Inflammatory, infectious (bacterial, viral, fungal, protozoal)
- Toxic
- Parasitic
- Iatrogenic (e.g. aspiration pneumonia)
- Genetic

1.6

Further diagnostic tests

Diagnostic work-ups should not be undertaken lightly. Many diagnostic procedures compromise the animal's welfare in some way, with some even leading to risk of death. Always ensure a valid scientific justification and an ability, either in the clinic or a laboratory, to analyse the results.

Never undertake a procedure unless it is the logical sequence of steps that should be followed to obtain a diagnosis.

Assess each case individually. If diagnostic services are not available it is better that no further work-up procedures are conducted. For example, there is no point doing a rectal examination if the clinician does not know the gastrointestinal tract anatomy well enough to detect abnormalities. There is little use in taking samples if a laboratory cannot analyse them. Always know where to seek advice or refer the animal if necessary.

No procedure should be done unless the benefit outweighs the harm.

Ensure that by further compromising the animal's welfare there will ultimately be an improvement, otherwise the diagnostic tests cannot be justified.

Specific diagnostic procedures can be found in the relevant chapters:

- Chapter 4 Clinical techniques
 - Taking blood samples
 - Making a blood smear
- Chapter 9 Ophthalmology
 - Nasolacrimal Flushing
 - Vision Testing
 - Fluorescein and Rose Bengal staining tests
 - Ophthalmic nerve blocks
- Chapter 10 The teeth – Ageing and a practical approach to dentistry
 - Nerve blocks – mental and infraorbital
- Chapter 11 The gastrointestinal system
 - Insertion of a nasogastric tube
 - Rectal examination
 - Abdominocentesis
- Chapter 12 The respiratory system
 - Nasal swabbing for viruses
 - Use of a re-breathing bag
- Chapter 13 The urinary and reproductive systems
 - Urinary catheterisation
 - Urine examination
 - Pregnancy diagnosis
- Chapter 14 The musculoskeletal system
 - Lameness work-up
 - Hoof testing
 - Palpation
 - Cleaning the hoof
 - Nerve blocks
 - Taking a synovial fluid sample
 - Flushing an infected joint
- Chapter 15 The integumentary system
 - Skin scrapings and smears
 - Fluid aspiration
 - Biopsies, tumour removal
- Chapter 17 Parasitology
 - Faecal egg counts

1.7

Owner communication and determining the prognosis for return to work

Why is good communication so important to animal welfare improvements?

Good owner communication is just as important as obtaining the most likely diagnosis.

Effective communication is essential to avoid owner confusion. By increasing owner understanding the animal will benefit. Even if a clinician does an excellent job, insufficient communication could give the impression that they do not know what they were doing, or even, do not care.

Always include the owner in the consultation process, in as many stages as safely possible.

Listen carefully to owners when taking a history and include them in the treatment process, as this encourages their interest in the case and good compliance.

- Teach them how to clean eyes and wounds, pick out feet, or change dressings. Demonstrate first, do not just describe because, unless they see it, they may not have the confidence to do it. Even better, once demonstrated, have the owner perform the task while observing before leaving them to continue at home, e.g. dressing a bandage on a wound.
- Let them help to medicate the animal the first time. An owner will often be more successful later since they have practised, especially with oral treatments.
- Speak with owners about all aspects of the animal's management and husbandry even if they are not directly related to the presenting problem.
- Encourage owners to see and feel the pathology, e.g. let them feel a swollen leg compared to the other one. This will help them to understand the problem.
- Encourage the owner to empathise with the animal and understand the pain or discomfort it is in.

It is the responsibility of the clinician to advise on as many issues as possible, given the time limitations of a consultation. Speaking with owners is an art form and will only improve with practice (Figure 1.7.2).



Figure 1.7.1 Good communication with the owner is an essential component of the consultation process.



Figure 1.7.2 Good communication with the owner is key to a successful outcome.

Prognosis

Prognosis is a prediction of how the presenting condition/disease will progress and the likely degree of recovery if the animal is given appropriate treatment and managed well in terms of owner compliance. Remember, in chronic cases the aim may not be total recovery but return to work. The two things are very different and it is important to be realistic about how the animal will perform in the future.

The ability to determine prognosis accurately often comes from previous experience. However, this improves dramatically with the correct diagnosis. This is where the clinical examination, history taking and owner communication all come together, and gives the clinician a chance for the owner to build up trust and confidence.

There are some generalities, but each individual case is different. As a veterinarian, there is a responsibility to examine the animal thoroughly and explain the potential outcome to the owner.

It is not always possible to obtain the exact diagnosis, but it is always possible to use a knowledge of biological principles and make an informed decision about that animal's potential to return to work.

1.8

Zoonotic disease

Presented below is a list of zoonotic infections that can spread from horses to humans. It is important when attending cases of suspected zoonotic disease that precautions are taken to protect your safety and also that the owners are informed of the risks. In many countries suspicion of certain zoonotic infections must be reported to the government authorities.

Anthrax See Section 11.5

Brucellosis See Sections 13.4 and 14.10

Cryptosporidium See Section 18.1

Dermatophilosis See Section 15.3

Glanders See Sections 12.7 and 15.3

Leptospirosis See Sections 9.6 and 13.4

Rabies See Section 16.1

Ringworm See Section 15.3

Salmonella See Section 11.6

Togaviral encephalitis See Section 16.1

Vesicular stomatitis See Section 11.4

West Nile Virus See Section 16.1

1.9

Case study – Communication and prognosis

Signalment A 9-year-old mare; has been in owner's possession 3 years. Used for transportation of people by cart.

History This animal presented with massive carpal swelling and chronic arthritis, whereby the owner requested the veterinarian to cut off the 'tumour'.

Clinical examination The carpus of the left forelimb was extremely enlarged, particularly on the dorso-medial aspect (Figure 1.8.1). The horse was 5/10 lame on the left forelimb at the walk. There was reduced range of motion on flexion of the carpus with a pain response from the horse (pulling the limb away from the examiner).

Diagnosis Carpal osteoarthritis with severe surrounding soft tissue swelling.

How should this case be managed?

Owners do not necessarily understand the underlying mechanisms as to why a condition presents visually the way it does. It should be explained in simple terms that the swelling on the carpus is not a tumour than can be surgically removed. If the owner does not understand this they may believe that the vet has not done a good job.

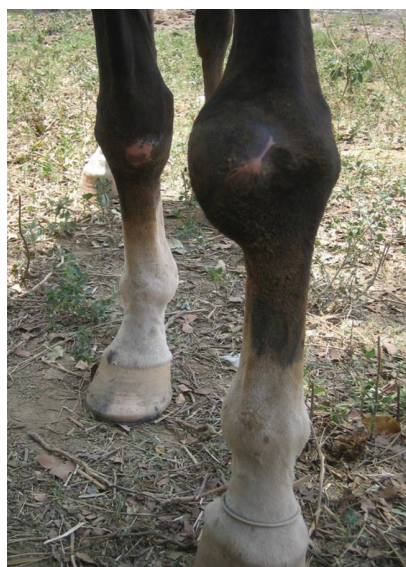


Figure 1.8.1 Carpal growth on the left foreleg.

Treatment Pain relief (non-steroidal anti-inflammatory drugs) short term IV, then long-term PO. Advice on resting the horse until improvement is seen in the condition. Follow-up phone calls and visits by the veterinarian to check on progress and alter advice and management as necessary.

Prognosis If chronic changes are already present then chances of improvement are reduced. In this case a prognosis of 'return to normal' is not likely. Instead, **this animal's lifestyle and pain must be correctly managed in order for her to have some relief and potentially 'return to work'.** However, if the underlying, long-term mechanisms for arthritis are not explained (chronic work on hard roads, possible previous injury, poor foot trimming, etc.) the owner will not understand why it cannot be fixed. Worst of all, if they brought their animal for a 'cure' which cannot be provided, the owner will not trust the expertise of the clinician, and consequently may not follow up any management advice which has been offered. The worst case scenario is that the owner will seek an even more damaging treatment such as firing (see Chapter 2).

Discussion See Section 1.1 of this chapter on the consultation process:

‘How can I make a long term, sustainable difference to this animal?’

The answer lies strongly with the concept of owner communication (Figure 1.8.2) – therefore ensure to invest in this every time!



Figure 1.8.2 Spending time in creating good vet-owner relationships will reap rewards for the animal.

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1.10

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