Autopsy Report BLACK VULTURE HKE – M900495 / K5

History:
Found on the 12/02/19. At Lira. 41°3’37,45” 26°16’1,32”
Contact E. Kret
The bird was fitted with a satellite transmitter and was found in the middle of the field. Despite an investigation in the surrounding area by an anti-poison detection dog no poison bait was found. No evidence of poison was found in places where the bird had previously visited.

The animal had already been opened to extract samples without an autopsy being conducted.

External examination:
Head: presence of eyes in good condition. Ela mentioned that the corpse was fresh at the time of the discovery and that the eyes were surprisingly clear. The ears are not abnormal. There are some fly eggs / larvae present. The oral cavity is empty except for the presence of some brownish mucous filaments **. A little digestive fluid flows when manipulated. No particular lesions detected at the oral level, in particular absence of lesion suggestive of a mycosis.

The body has no abnormality, the feathers are in good condition, some are a little damaged at the GPS transmitter attachment area due to friction but there are no underlying lesions. Presence of some lice in the feathers. The cloaca is clean. An opening is visible from the middle of the abdomen to the middle of the thorax (in connection with the samples taken previously) *
The wings are not abnormal, the feathers are in very good condition, none are missing.
On the legs, no anomaly visible under the ring ; a small brownish spot is visible on the left plantar face, but scratching and cutting shows a superficial location, unrelated to a possible burn *. The feathers of the tail are all present and without any anomaly.
The palpation of all the superficial bones does not reveal a fracture. The joints were not opened due to normal handling despite incomplete thawing.

At the opening :
The opening is done on the previous traces of cutting.
Presence of subcutaneous fat in large quantity. Thoracic muscles are very well developed (fitness score 5/5). The muscular staining is normal but the vascular network is very visible **.

**Opening cavities:**
Very little abdominal fat but it was probably removed during the previous sampling (bird's overweight condition). The abdominal organs are out of place. The intervention of a person who tore the thoracic viscera before the opening of the breastplate will not allow the examination of organs in their place. Once the plastron is open, only visible:
- the lungs: dry, brownish on the surface, the section shows congestive or hemorrhagic zones on both sides *. Due to drying out, no flotation test performed;
- the rest of the trachea, cut at the level of the cardiac bottom during tearing;
- the end of the oesophagus with some brownish fluid.
- both kidneys, of normal size and shape, but congested **. Presence of perirenal fat of normal color and appearance. No trace of gout. The section confirms significant congestion *.

Examination of the viscera that was torn off:
Only half of the liver is present (right lobe) * and shows the trace of a section and the marks of tearing. The edges are rounded, the liver looks darker and the cup confirms congestion **. The gallbladder is present, it is full. The corpse is still slightly frozen, it is difficult to conclude on the appearance of the bile which seems however normal. The bile has slightly diffused into the adjacent fat.
The pericardium is fine, soft and translucent and contains no liquid. Fat is present in the atrioventricular groove. The vascularity is clearly visible. The heart is of normal shape, color and cross-section. Presence of blood in the 4 cavities. The muscular wall is without abnormality, the valves are normal. The stomach has already been opened (previous sampling). It still contains a food residue, without any notable feature. The mucosa is normal. The intestines are congested over their entire length. The opening releases a thick, brownish mucous content** except at the level of the gall bladder. Presence of 2 parasites (roundworms) in the intestine (removed). The cloacal part is not visible (torn during previous sampling). The spleen is slightly enlarged, the section reveals congestion*.

**Opening of the neck:**
The crop contains food, bathed in some brownish liquid. Examination of this food bolus shows small black grains that may suggest the presence of a
cholinesterase inhibitor such as carbofuran or aldicarb **.
The **trachea is normal.** The jugular veins are not damaged but congestive and the blood has diffused slightly into the surrounding muscles.

**Opening of the cranial cavity:** the skin of the skull does not present any lesion. After removal, the cranial cavity appears congested, with an area that appears hemorrhagic above the right eye. The section of the cranial cap confirms intraosseous hemorrhage over an area of about 0.5 cm² **. The meninges are congested, especially in the posterior zone, but they are not thickened **. The brain is very congested **. It was sampled for further analysis.

**In conclusion:**
The musculature and the state of being overweight of the animal are in favor of acute phenomenon. The fact that the bird has eaten in quantity just before death supports this fact. No particular lesion can explain death (absence of abdominal trauma, fractures, no visible visceral impairment ...).
The congestive appearance of the corpse, the presence of mucus in the digestive tract, the haemorrhagic congestion of the lungs and the presence of small grains in the esophageal contents are in favor of poisoning by a cholinesterase inhibitor. This suspicion must be confirmed or invalidated by the toxicological analysis.

**Warning:**
- The absence of radiography does not allow to conclude on the possible presence of lead hunting ammunition.
- Because of the previous intervention for sampling and the removal of viscera during autopsy before in situ examination, some lesions could be masked.
- No photo was taken (autopsy not planned). So, are noted * lesions that deserved a cliché, ** those imperative to make and communicate.
**Guideline autopsie**

<table>
<thead>
<tr>
<th>Numéro d'enregistrement</th>
<th>20/02/2019</th>
<th>Responsable de l'autopsie</th>
<th>Florence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date de l'autopsie</td>
<td>20/02/2019</td>
<td>Date de découverte</td>
<td>12/02/2019</td>
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<tr>
<td>Projet</td>
<td>A. monachus</td>
<td>Identification</td>
<td>H21456</td>
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<tr>
<td>Lieu de découverte</td>
<td>Lin - Filakoto 41°3'34.4&quot; N 26°16'1.32&quot;</td>
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<td>Personne(s) de contact sur le terrain</td>
<td>Ekkie Kret WUF Greece <a href="mailto:e.kret@wuf.gr">e.kret@wuf.gr</a></td>
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<tr>
<td>Commémoratifs</td>
<td>The bird was fitted with a satellite transmitter. It was found in the middle of the field. The area was searched with the use of anti-poison dogs, but nothing was found. To locations from previous days where the bird might feed were also checked, but nothing related to poison events was found.</td>
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<tr>
<td>Poids</td>
<td>Envergure</td>
<td>Radiographie</td>
<td></td>
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<tr>
<td>Aspect extérieur</td>
<td>Plumages, peau, muqueuses, orifices, embonpoint</td>
<td></td>
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<tr>
<td>Plaies ou fractures</td>
<td>Bruising of the cranium</td>
<td></td>
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<tr>
<td>Etat de conservation du cadavre</td>
<td>WELL PRESERVED (FRESH) BUT RECENTLY FROZEN</td>
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<tr>
<td>Ouverture des cavités</td>
<td>Embonpoint, épanchements</td>
<td></td>
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<tr>
<td>Muqueuses</td>
<td>Oculaire, buccale, nasale, auriculaire, cloacale</td>
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<tr>
<td>Arbre pulmonaire</td>
<td>Narines, syrinx, trachée, bronches, poumons</td>
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<tr>
<td>Sacs aériens</td>
<td>Blood inside lungs Congested lungs</td>
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</tbody>
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Système cardiaque : cœur, péricarde, grosses artères
Heart in good condition.

Nœuds lymphatiques :

Tube digestif : cavité buccale, œsophage, jabot, (pro ventricule, gésier), estomac, anse duodénale, iléon, caecum, colon
- Blood + mucus in buccal cavity.
- Hæminth inside GI (samples).
- Food inside crop with black spots/particles visible.
- Congested intestine.
- Mucus on interior of small intestine.

Foie, pancréas et voies biliaires :
Congested liver.

Cloaque :

Rate :
Congested spleen.

Système rénal : 3 lobes rénaux droit et gauche (crânial, moyen, caudal), uretères, veine iliaque externe, veine rénale efférente caudale
Congested kidney.

Gonades :
Not visible.

Système nerveux : cerveau, plexus nerveux sciâtiques
Hæmorrhage on brain membrane.
Very congested brain.

Appareil locomoteur : os, tendon, ligaments, muscles, articulations

Conclusion d'autopsie :
Congestion throughout lungs, liver, kidney, brain.
Hæmorrhages present.
Possible consistent with acute poisoning but not sufficiently hæmorrhagic. Other possibility is infection but death appears sudden + acute.

Analyses en cours : Préciser quel organe pour quel laboratoire.

Facturation à :
- Autopsie :
- Analyses :
  -
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* Not sufficient for firm conclusion of poisoning.