

DIAGNOSIS OF OBSTRUCTIVE DISORDERS – A COMPILATION OF 5 CASES

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Introduction:-

Obstructive disorders are very commonly come across in veterinary clinical practice. Their timely diagnosis and surgical intervention indicate the percentage of success obtained.

Obstruction of any tract ie respiratory, digestive, urinary or even reproductive, can be caused mainly by foreign bodies, turnovers inside or outside the tract, obstruction by foetus, calculi of the respective tracts.

This article is intended to encourage clinicians in the field to utilize minimal diagnostic aids, eg. x-ray for diagnosis and provide relief surgically wherever necessary.

Case 1 : Foreign Body in Larynx

A 6 month old male Dobermann, was present at DVC, Thiruvananthapuram was presented with the complaint of mild respiratory dyspnoea and inactivity. The day before, it had swallowed a big piece of chickenbone, after which it had eaten bread and milk. The animal showed leucocytosis with neutrophilia and was positive for microfilaria. Induced cough was also present. It was treated for trachitis for 2 days, but since a swallowing movement persisted, it was sent for x ray on the next day. The x ray revealed a foreignbody (



piece of bone) in the larynx upto the initial part of trachea.

Laryngotomy and tracheotomy was performed under general anaesthesia under aseptic conditions.

The recovery was uneventful and the animal was normal by the end of the 2nd week.

Case 2 : Foreign Body in ileum

A 8 month old male Spitz was presented with anorexia 4 days after it swallowed a metallic bell while playing with its owner.



On external palpation the animal showed definite pain and hard mass in the abdomen. Conjunctiva mucosa was congested and blood picture revealed leucocytosis with neutrophilia and elevated ESR. An immediate X-ray revealed the presence of the foreign body within the ileum.

Enterotomy was carried out under general anaesthesia with aseptic conditions and the foreign body was removed.

Recovery was uneventful. The animal fed on liquid by the third day and solids by the end of the week.

Case 3 : Foreign Body in Oesophagus

A wild stork was presented at DVC, Thiruvananthapuram, with a fishing hook obstructing



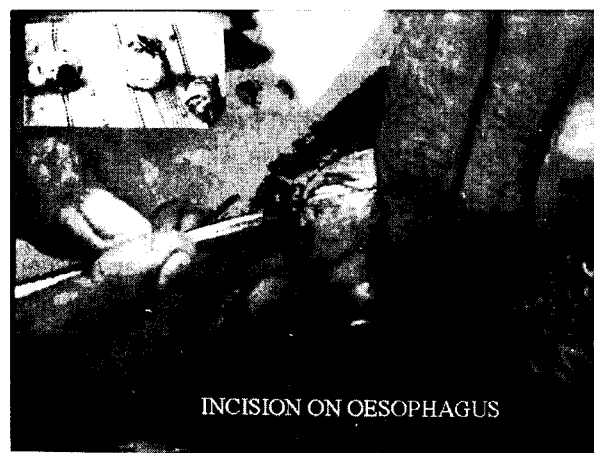
the oesophagus. The owner, who had his own lab, had already taken an X ray.

Under ketamine anaesthesia the fishing hook was approached directly and removed surgically.

The owner reported that the stork flew away on the third day.

Case 4 : Oesophagolith in a python

A python in Trivandrum Zoo showed anorexia for many days. On close examination a lump was observed on left side of the anterior third of its body.



It was decided that the lump be removed surgically under general anaesthesia. The lump was found to be an oesophagolith obstructing the digestive tract. Recovery was not smooth as resuturing of the skin had to be done.

Case 5 : Fecolith in a dog

A 4 year old male Labrador was presented with vomiting soon after feeding. The animal was being treated elsewhere and by the time it was presented, it was depressed with sunken eyes; dehydration had set



in. The X ray revealed an obstruction at the distal end of the digestive tract.

After apprising the owners on the grave prognosis, caecotomy was performed under general anaesthesia. Though the fecolith was removed, the bowels, were engorged with foul smelling contents and gangrenous; The animal died on the next day.

Obstructive disorders of other tracts:

The urinary tract can be obstructed at any site, ie within the kidney, ureters, urinary bladder and/or urethra, by calculi, neoplasms.



The reproductive tract also can be blocked by a foetus (ie dystocia), torsion of uterus and by tumours of epithelial and mesenchymal origin.

Symptoms and Diagnosis :

1. Respiratory tract:- Respiratory dyspnoea, sneezing, snoring in extreme cases, epistaxis, vomition of blood, cough and fever may occur in some cases.

The position of the obstruction in the rostral and caudal nasal passages, pharynx, larynx, trachea etc will show differences in symptoms. In the case

discussed, the only indicative symptom was a swallowing movement and mild respiratory distress.

The history of the case, close examination of exhibited symptoms combined with blood examination, X rays and also cytological examination of the nasal exudates, vomitus, nasal and pharyngeal swabs are pointers to the exact condition. If necessary fine needle aspiration cytology can be done especially if we have the services of a clinical laboratory or a pathologist nearby.

2. Digestive Tract:- Symptoms vary depending on the type of obstruction. Complete and sudden obstruction, like that of a foreign body will lead to acute symptoms like anorexia, vomiting, dullness etc., whereas partial obstruction especially in the case of neoplasms, esophagoliths, fecoliths etc, intermittent inappetence with gradually developing dullness, dehydration, vomiting at times, may be some of the only symptoms observed. Since these are not concrete, we should use other diagnostic aid like hematology, serum biochemistry and X rays. Contrast radiographs, CT scans etc are very useful to locate the site of obstructions. However a clinician at the field may have access to these aid only if he has a good rapport with a near by diagnostic laboratory.

3. Urinary Tract:- Complete obstruction will lead to straining, anuria, off feed, dullness accumulation of urine in the bladder. Partial obstruction caused by growing neoplasms, shifting calculi, lead to anuria / dysuria and haematuria. The condition will progress gradually and animal will not improve with medical treatment.

Diagnosis, apart from evident symptoms, can be inferred after urinalysis, haematology, X rays, contrast radiography, ultrasonography are carried out.

4. Reproductive Tract:- There are cases of dystocia which can be diagnosed by per vaginal examination, X rays and / or ultrasonography. In the case of complete torsion of the uterus, the animal would have shown signs of whelping but parturition would not take place. In such cases if there is only 1 foetus, then the animal will be active and normal for a 3-4 days before showing signs of going down.

Neoplasms of the reproductive tract need exfoliative cytology or cytology of any discharge present to be diagnosed uterine radiographs, ultrasonographs, abdominal palpation are the main methods diagnosis of uterine masses. Usually the differential diagnosis may be done only after ovariohysterectomy.

Factors involved in successful treatment of obstructive disorders

There are various factors involved in successful treatment of obstructive disorders; they are,

1. Early presentation of the case
2. Close study of symptoms exhibited
3. Thorough external examination each day:

If one of such cases does not improve by medical treatment, always looking further into the case and use necessary diagnostic aids and will ensure early diagnosis and treatment.

4. Use of necessary diagnostic aids:

I would always encourage my fellow clinicians to develop a rapport with your nearest clinical laboratory, so that at times of need, haematology, serum biochemistry, X rays, and if possible ultrasonography and CT scan may be used for our benefit. This will help us to avoid explorative laparotomies and instead conduct radical surgeries.

5. Apprising the owner of the condition and encouraging him to observe other indicative symptoms.

6. Proper decision regarding the time of surgical intervention is warranted. Surgical intervention will be successful only when done early. The animal should be active and alert with all vital signs positive. A dehydrated animal with sunken eyes, cold extremities, slow heart rate, thready pulse will almost always succumb during surgery.

7. Proper pre anaesthetic procedures, asepsis, anaesthesia and surgical techniques will always ensure your success. These are the basics of successful surgery and cannot be ignored. If anaesthesia is not proper, surgery cannot be conducted smoothly and extraction of obstruction will be traumatic to the struggling animal.

8. Work as a team including a qualified surgeon wherever possible.

Conclusion

Obstructive disorders of the various tracts of the body are very common in animal patients. Their timely diagnosis & treatment is warranted to save lives. This article briefly covers the symptoms and diagnosis of such obstructions with reference to the field vet and provides such details of 5 cases where timely diagnosis proved very essential in successfully treating the cases.

