Standard Operating Procedure

SOP Number: 02-18-5651
Service: Research
Operating Section: Diagnostic Laboratory
Unit: CMF
Title: Examination of Fecal Samples

Purpose:
To define methods used in the examination of fecal specimens for endoparasites. These assays are performed to aid in monitoring the health status of colony animals and to provide laboratory support to investigators as desired.

Procedure:
1) When a stool specimen is received for examination, it should be examined macroscopically, including:
   a) a description of the consistency (watery, loose, soft, formed)
   b) an examination for tapeworm proglottids or adult nematodes
   c) a description of any evidence of intestinal pathology, such as blood or mucus.
2) Direct fecal examination (wet mount)
   a) A small portion of feces is emulsified in a drop of saline on a microscope slide, covered, and examined.
   b) Subsequently, a drop of Lugol’s iodine solution (or equivalent) may be placed adjacent to the coverslip, allowing to be drawn under the coverslip. The slide is then re-examined.
3) Fecal flotation assay
   a) For fecal flotation, FecaSol, a modified Sheather’s sugar flotation solution, or solution of equivalent specific gravity will be used.
   b) A small amount of feces (1-2 grams, if possible) is transferred to a container suitable for flotation. The feces is suspended in a small amount of flotation solution by vigorous stirring. Enough flotation solution is added to create a noticeable meniscus at the top of the container, and a coverslip is placed on the meniscus.
   c) Flotation should occur for at least 10 minutes. The coverslip is then placed on a glass slide and examined microscopically.

Results:
1) Results are recorded on the CMF diagnostic laboratory form and saved on the shared laboratory drive.
   2) Whenever possible, parasites should be identified to the most specific possible taxonomic level. If identification is not possible, a description of the findings should include: size, shape, and any identifying features such as the presence of opercula or embryos/larva.

APPROVALS

<table>
<thead>
<tr>
<th>Responsible Official</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>QA</td>
<td></td>
<td>12/06/2017</td>
</tr>
</tbody>
</table>

Version | Effective Date | Supersedes | Original Date |
---------|----------------|------------|---------------|
#3       | #2             | 04/13/00   |               |