



耳道疾病的防治



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Ear disease 耳道疾病的防治

is one of the most common reasons people bring their pet to see the vet. Ear disease is painful for your pet, and if not treated properly can lead to ongoing problems. For that reason it needs to be treated seriously, and treated as early as possible.

耳道疾病是宠物主人带宠物到医院救治的常见原因之一。

耳道疾病多数伴有持续性疼痛，如果不能及时有效的进行治疗，病情将会渐进性加重。

What is ear disease? 什么是耳道疾病？

Ear disease or 'otitis externa' means inflammation of the external ear canal. It can occur in cats and dogs of any age and has a number of causes.

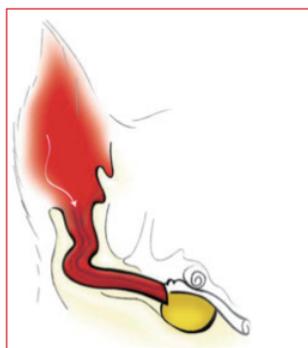
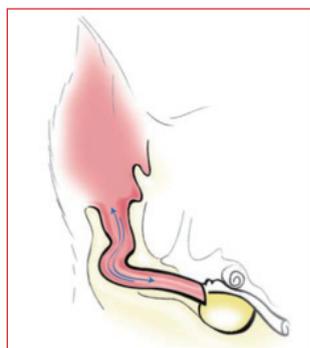
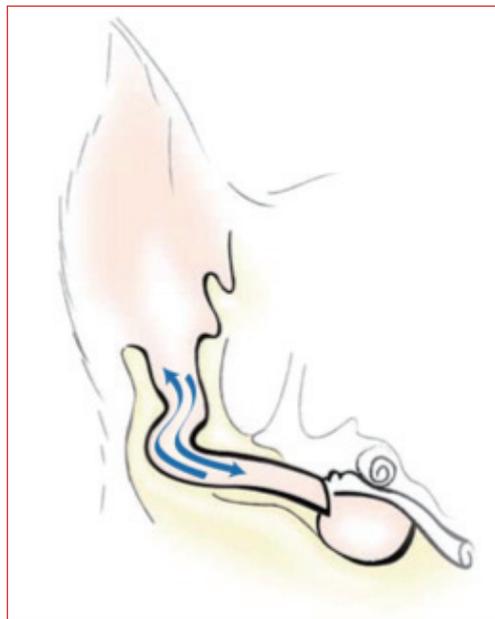
耳道疾病或外耳炎是指外耳道的炎性反应。任何年龄段的犬猫均可能发生。

It is important you regularly check your pet's ears and watch out for the signs of ear disease so they can be treated before they get any worse.

在耳道疾病变得严重之前的例行常规耳道检查、识别耳道疾病特征以及及时治疗非常重要。

Unlike the human ear, your pet's ear is deep and curved - this shape makes some pets prone to developing ear disease.

不同于人的耳道，宠物耳道深而弯曲 - 这样的耳道结构使得宠物易患耳病。



Dirt and wax can easily accumulate and it is difficult for moisture to get out.

污垢和耳蜡很容易在耳道堆积而不易清除。

This is further complicated in dogs with pendulous ears that hang down (e.g. spaniels) as it is difficult for air to circulate. This hot and humid environment is ideal for the growth of bacteria and yeasts which cause infections.

垂耳犬由于没有很好的耳道通风条件，高温潮湿的耳道环境更加有利于细菌和真菌的增殖而导致感染。



Signs of ear disease 耳病症状



- Unpleasant smell – sometimes described as ‘yeasty’
恶臭 – 有时被描述为“腐臭”
 - Excessive scratching and pawing of the ear and head
– pets may also rub their head on the floor
过度抓挠耳部和头部 – 宠物有时会头蹭地面
 - Sensitivity to touch – your pet may show a painful reaction
when you touch the ear or surrounding area
触碰敏感 – 当触碰耳部及周围时表现疼痛反应
 - Increased shaking of the head
频繁而剧烈地甩头
 - Tilting the head to one side
头斜向一侧
 - Accumulation of dark brown wax
积聚棕褐色耳蜡
- Discharge from the ear – this can be yellow-black in colour 黄黑色耳道分泌物
 - Bleeding or discharge resembling coffee grinds 血样或咖啡沫样分泌物
 - Redness or swelling of the ear flap or canal 耳廓或耳道红肿
 - Changes in behaviour including lethargy 行为改变，嗜睡
 - Loss of balance or hearing and disorientation 共济失调、失聪、定向障碍

If you notice any of these signs, please make an appointment with your vet as soon as possible.

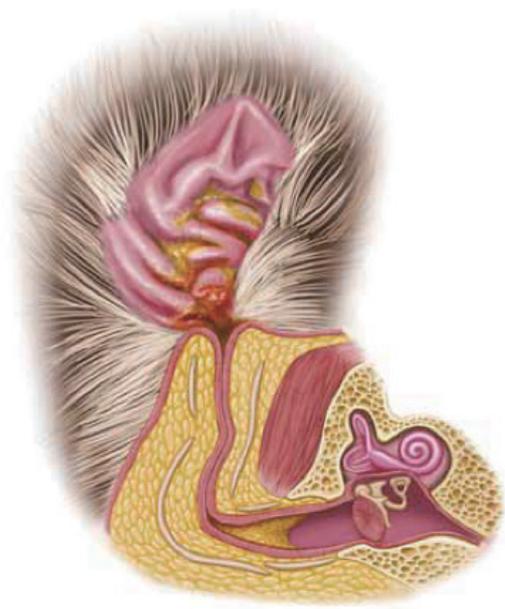
如果发现这样的情况需要及时就医。

All cases of ear disease should be treated quickly and effectively. Otherwise, the inflammation can lead to permanent changes such as thickening and distortion of the ear canal.

所有耳道疾病需要快速有效的治疗。否则炎症会导致耳道壁增厚和耳道弯曲等永久变形。

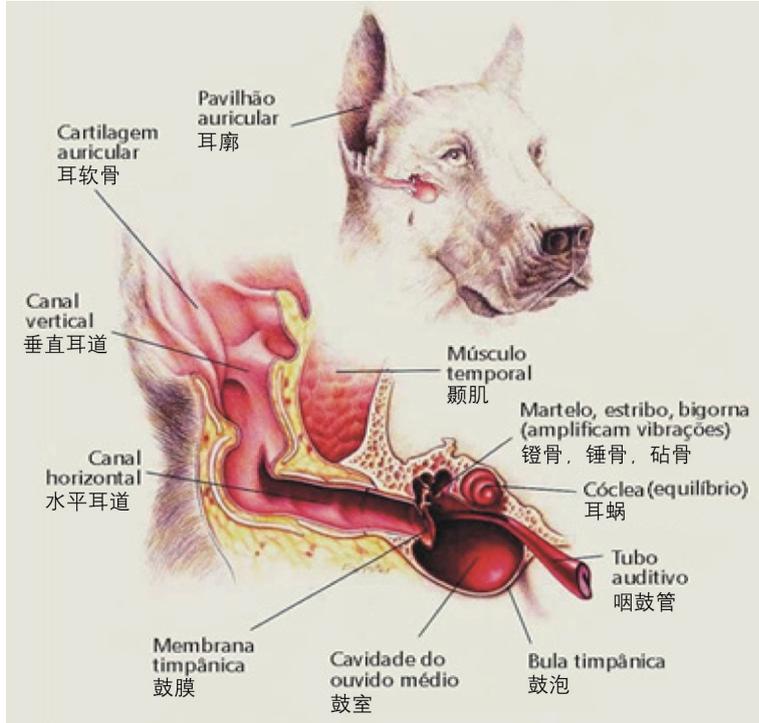
This in turn makes it more likely your pet will have another bout of ear disease – starting the whole painful cycle all over again.

这会导致宠物进入下一个疼痛恶性循环圈。





What causes ear disease? 耳道疾病原因



Ear disease is usually caused by a combination of factors, which create conditions more favourable for the growth of bacteria and yeasts. Anything which impedes removal of wax and debris, reduces air circulation and keeps the ear canal warm and humid will encourage growth of these organisms. In most cases of ear disease, both bacteria and yeasts are found.

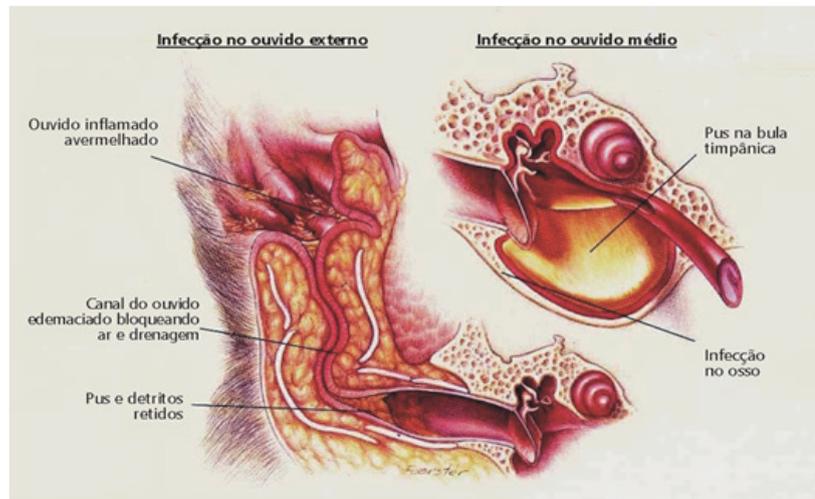
耳道疾病往往是多因素导致细菌真菌大量增殖。任何阻碍耳蜡和污垢排出，减少空气流通和维持耳道高热潮湿的因素都将导致微生物增殖。多数病例都是细菌真菌混合感染。

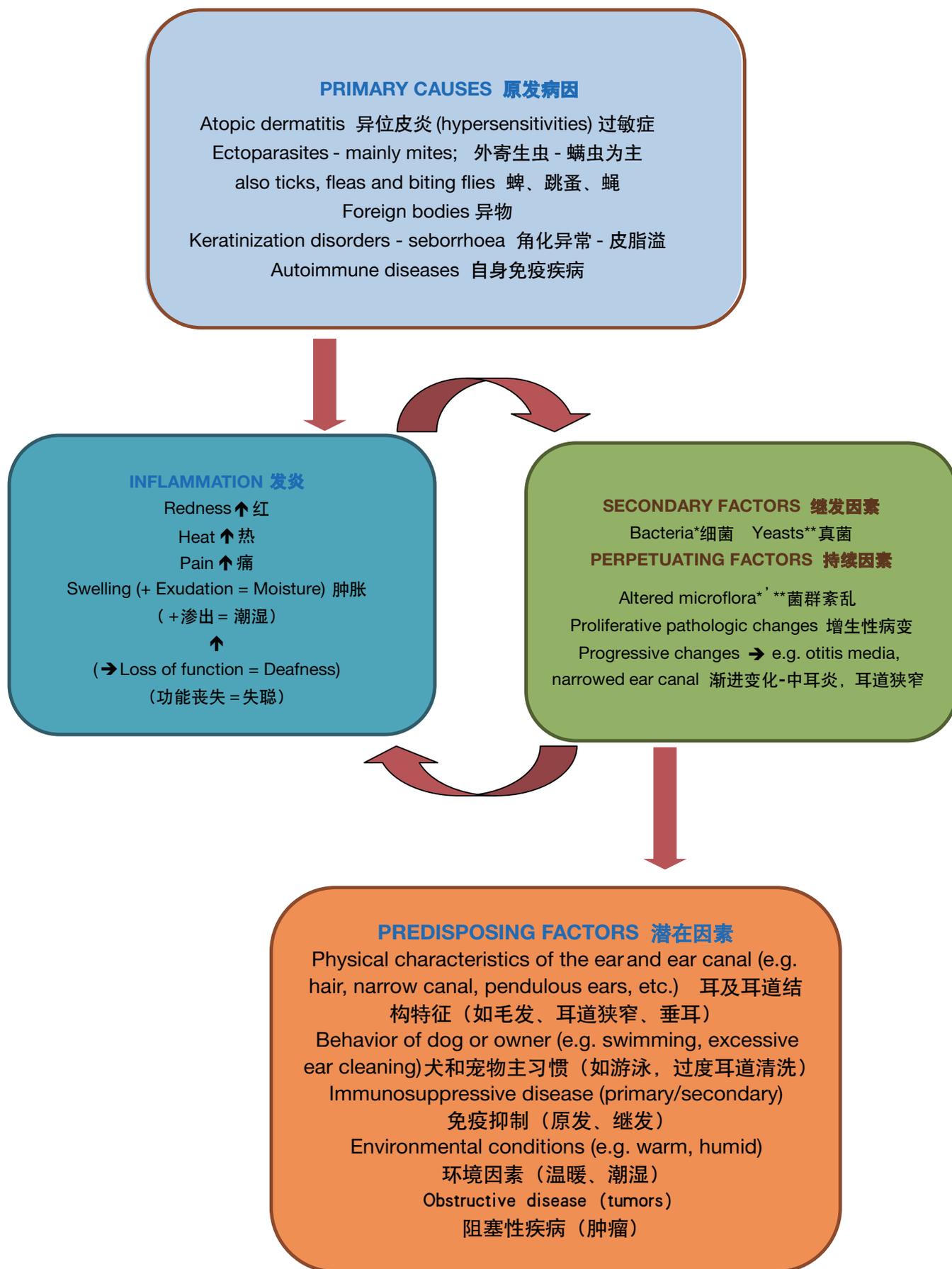
Some dogs are more likely to develop ear disease than others. Factors such as having low-hanging ears (e.g. spaniel, retriever) and lifestyle factors such as frequent swimming all affect the chances of getting ear disease.

某些犬种发病率高于其他犬种。原因包括：垂耳、经常游泳。

Many pets with ear disease also suffer from skin allergies, also known as atopy. The most common areas affected are the ears and between the toes. Atopy is more often seen during the summer months but it can occur all year round.

一些发生耳道疾病的犬可能是由于皮肤过敏，如异位性皮炎。常见区域包括耳道和指间。异位性皮炎多发于夏季，但一年四季都有可能发生。







Diagnosing Canine Otitis Externa 外耳炎诊断

1. Initial diagnosis is fairly easy
初诊相对容易
2. Correctly identifying the primary cause & contributing factors can be very difficult
正确识别主要原因和相关因素将是非常困难的
3. Failure to identify the primary cause & blindly treating the disease
- May provide only temporary relief & leads to recurrence of the problem
原发病因不明和盲目治疗 - 可能临时症状缓解和导致疾病复发
4. Incidence of the external ear Inflammation
外耳道炎症发生率



10-20% Incidence 发生率



Less common 少见

Diagnostic Tools 诊断方法

Otoscopy 耳镜检查

- May require anesthesia 可能需要辅以麻醉
- May require several days of anti-inflammatory medication 可能需要几天时间的抗炎药治疗



外耳炎耳道



正常耳道



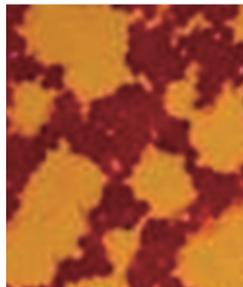
Cytologic smears 细胞学抹片

- Quick, easy visual representation of what is occurring in the ear
快速直观了解耳内情况

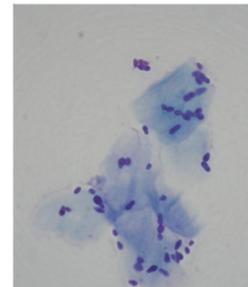


Culture 培养

- Not routinely performed 非常规项目
- Often reserved for chronic cases 主要针对慢性疾病
- More than 75% of canine ears have positive bacterial culture 超过75%的犬耳道细菌培养阳性结果
- 14 to 49% of canine ears have positive yeast culture 14 - 49% 犬耳道真菌培养阳性结果



Staphylococcus pseudintermedius
中间型葡萄球菌 (formerly *S. intermedius*)



Malassezia pachydermatis
厚皮马拉色氏菌

Allergy Testing 过敏测试

- Helps identify primary causes 帮助确认原发病因



Radiographs X 线和 CT (Computed tomodensitometry)

- Helps confirm the presence of otitis media 帮助确认中耳炎的存在





Remember to tell your vet if you often see your pet licking or nibbling its feet.

如果发现宠物经常舔和啃咬脚部，一定要让兽医知道这种情况。



Foreign bodies in the ear, such as grass seeds, can cause trauma and encourage growth of bacteria and yeasts.

耳内异物，如草籽能导致损伤，增加细菌和真菌增殖。

The resulting inflammation and infection needs treatment as soon as the foreign body has been removed.

异物移除后一定要进行抗炎抗感染治疗。

How is ear disease treated? 耳道疾病如何治疗

Ear disease can be treated in a number of ways and your vet will recommend the best option for your pet.

耳道疾病治疗方法很多，兽医会给推荐一种最佳的方式。



Usually this includes an ear cleaner (such as Sancerum) as well as a topical medication (ear drops) which you will need to apply at home.

耳道清理和局部用药同时进行，并且需要在家自己操作。

The ear cleaner helps to remove the wax and debris that create favourable conditions for infection, while the drops will tackle the infection itself. Prescription ear drops usually contain an antibiotic to treat bacteria, an antifungal to treat yeasts, plus an anti-inflammatory to make your pet feel more comfortable.

耳道清理是帮助清除耳蜡和污垢，减少感染机会，洗耳液需要包含抗细菌和抗真菌成分，同时还有抗炎成分让宠物感到舒服。

Some pets may also be prescribed tablets or given an injection. In some cases, the problem may be so advanced that your pet may even need surgery. This is why it is so important to recognise and treat ear disease early.

一些宠物可能需要口服或注射药物治疗。有的甚至需要手术治疗，这就是为什么要尽早识别和治疗耳道疾病的原因。



Cleaning is an important part of treatment for ear disease 清理是耳道治疗最重要的部分

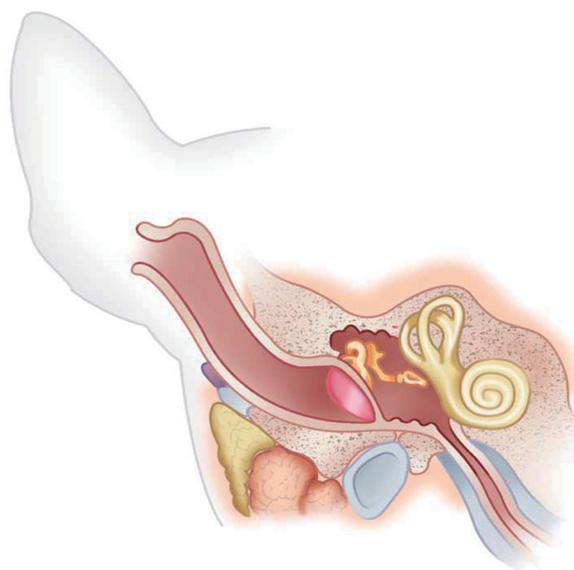


Cleaning can help during a bout of ear disease, as removing wax, debris and discharge helps the medicated drops reach the surface of the ear canal. It also reduces yeast and bacterial numbers and makes the environment of the ear less encouraging for growth of these organisms.

清理在耳病治疗期间能够帮助移除耳蜡、耳垢和分泌物，以使药物能够直接接触到耳道表面。同时也能够减少细菌和真菌的数量，使耳道环境不利于微生物的繁殖。

Regular ear cleaning is often advised once a pet has had ear disease, as by removing wax and debris and drying the ear (cleaners such as Sancerum also contain drying agents), the conditions become less favourable to the growth of unwanted organisms. Some cleaners, e.g. Sancerum, have proven antimicrobial properties and can reduce the number of bacteria and yeasts in the ear, and help maintain a normal environment.

一旦宠物患有耳道疾病，定期耳道清理是必须的，移除耳蜡和耳垢，干燥耳道（Sancerum 含有干燥成分）使耳道内环境不适合微生物繁殖。一些洁耳液如 Sancerum 能提供抗菌特性并且能够减少耳道内细菌和真菌的数量，维持正常的耳道内环境。



Cleaning is essential maintenance for many pets with ear disease.

耳道清理是许多耳道疾病必需的辅助措施。



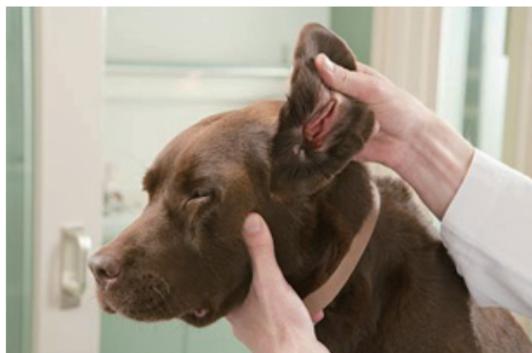
How to clean your pet's ears 如何清理宠物耳道

1. Gently restrain your pet.
温柔的保定宠物。
2. Lift up the ear flap so you can see the entrance to the ear canal.
轻提耳廓以便能清楚的看见耳道开口。
3. Apply a liberal amount of ear cleaner into the ear canal (such as Sancerum).
将足够量的洁耳液灌入耳道内。
4. Massage the ear canal gently for 10 to 20 seconds to ensure good cleaning (you can usually feel the canal as a solid tube lying just under the skin below the entrance hole). You should hear a squelching sound when you do this.
轻柔的按摩耳道 10~20 秒，确定整个耳道都清理到（通常能感觉到耳道结构）。一般都能听到盥洗的声音。
5. Remove excess fluid and discharge from the entrance to the ear canal using clean cotton wool, and clean the inside of the ear flap. Do not use cotton buds or push anything down the ear canal as this may cause damage.
用清洁的棉布织物清理耳廓内多余的液体和分泌物。不要使用棉签或任何能够导致耳道损伤的物品进入耳道内。
6. Repeat the procedure until the excess fluid no longer looks dirty.
重复刚才的操作直到排出的液体不再看起来那么脏。
7. Clean the nozzle, and repeat the process in the other ear.
清理耳道口，另一只耳进行同样的操作。

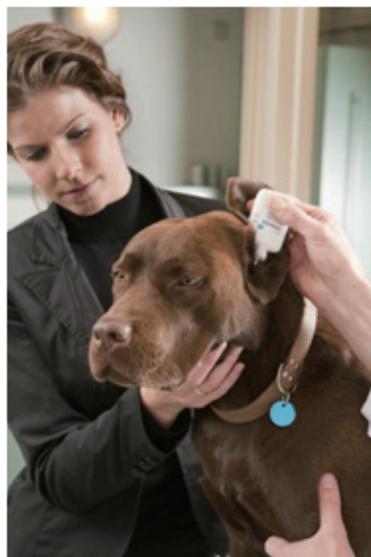




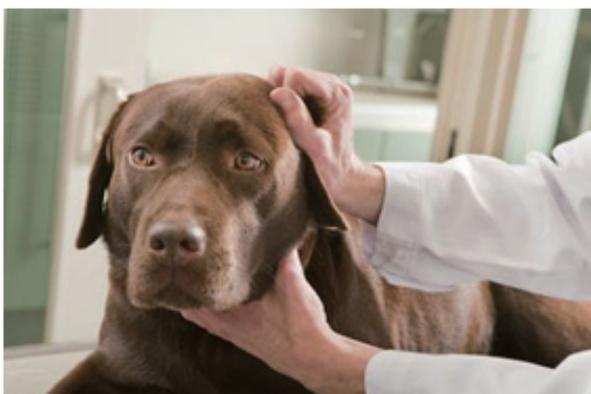
How to apply medicated drops to your pet's ears 如何给宠物上耳药



1. Gently restrain your pet. Lift up the ear flap so you can see the entrance to the ear canal.
温柔的保定宠物。轻提耳廓以便能清楚的看见耳道开口。



2. Apply the required number of drops of the treatment into the ear canal.
将需要的耳液滴入耳道内。



3. Massage the ear canal thoroughly and gently for 10 to 20 seconds to make sure that the treatment gets all around the ear canal (you can usually feel the canal as a solid tube lying just under the skin below the entrance hole). You should hear a squelching sound when you do this.
彻底轻柔的按摩耳道 10~20 秒，确定整个耳道都触及到（通常能感觉到耳道结构）。一般都能听到盥洗的声音。



4. Remove any excess fluid and discharge from the entrance to the ear canal using clean cotton wool, and clean the inside of the ear flap. Do not use cotton buds or push anything down the ear canal as it may cause damage. Repeat the procedure with the other ear.
用清洁的脱脂棉清理耳廓内多余的液体和分泌物。不要使用棉签或任何能够导致耳道损伤的物品进入耳道内。同样的方式处理另一只耳朵。



外耳炎治疗方法与药物对照表

Topical vs. Systemic Therapy for Otitis Externa 外耳炎治疗方法对比

Topical therapy 局部治疗	Appropriate for the majority of cases, Deliver medications directly to the affected area, Relatively easy for owners to administer, Relatively inexpensive 适用于大多数病例，患处直接用药，主人给药方便，相对便宜
Systemic therapy 全身治疗	Reserved for severe cases or where owners unable to administer topical medication appropriately, Treat entire animal therefore greater risk of adverse effects, Oral treatment relatively easy for most owners to administer, Often more expensive than topical therapy 严重病例或主人无法局部给药，全身副反应，主人口服给药相对容易，相对较贵

Antibiotics In Otitis Externa 外耳炎常用抗生素

Antibiotic(s) 抗生素	Spectrum of activity 抗菌谱	Action 作用
polymyxin B 多粘菌素 B	Narrow (Gram-only) 窄 (仅革兰氏阴性)	Bactericidal 杀菌
aminoglycosides (framycetin, gentamicin, neomycin) 氨基糖苷类 (新霉素 B、庆大、新霉素)	Broad (Gram+ and Gram-aerobes) 宽 (革兰氏阳性和革兰氏阴性需氧菌)	Bactericidal 杀菌
cyclic oligopeptides (thiostrepton) 环低聚肽 (硫链丝菌素)	Broad (Gram + and Gram -) 宽 (革兰氏阳性和革兰氏阴性)	Bactericidal 杀菌
fusidic acid 褐霉素	Narrow (Gram + only) 窄 (仅革兰氏阳性)	Bactericidal 杀菌
sulfonamides (silver sulfadiazine) 磺胺药 (磺胺嘧啶)	Broad (Gram + and Gram -) 宽 (革兰氏阳性和革兰氏阴性)	Bactericidal 杀菌
fluoroquinolones (enrofloxacin, marbofloxacin, orbifloxacin) 氟喹诺酮类 恩诺沙星、麻氟、奥比沙星	Broad (Gram + and Gram - aerobes) 宽 (革兰氏阳性和革兰氏阴性需氧菌)	Bactericidal 杀菌

Antifungals In Otitis Externa 外耳炎抗真菌药

Antifungal agent(s) 抗真菌药	Spectrum 谱
Imidazoles (clotrimazole, miconazole, posaconazole, thiabendazole) 咪唑类 克霉唑、咪康唑、普沙康唑、噻苯哒唑	Broad 宽
Polyenes (nystatin) 多烯类 (制霉菌素)	Broad 宽
Sulfonamides (silver sulfadiazine) 磺胺类 (磺胺嘧啶银盐)	Narrow (yeasts) 窄 (霉菌)
Undecylenic Acid 十一烯酸	Narrow 窄



Vehicles 佐剂

Vehicle 媒介	Advantages 优势	Drawbacks 缺点
Solutions (and gels) 液体 (凝胶)	easy to use - can be applied as drops with minimal friction, non-occlusive 使用方便，不结块	frequent administration needed, stinging on application - contain alcohol 频繁使用，刺激性强
Ointments 油膏剂	moisturizing, prolonged contact time 保湿，接触时间长	do not distribute well within ear canal, occlusive - greasy, sticky 分散不均匀，结块 - 油腻，粘
Creams (depending on water content) 乳膏	spread more easily than ointments, less greasy than ointments, Relatively prolonged contact time 比油剂易扩散，不油腻，接触时间相对长	do not distribute well within ear canal, not suitable for exudative lesions, can cause contact allergy (preservatives) 分布不均，不适用于渗出性损伤，能导致接触过敏（防腐剂）
Suspensions (depending on water content) 悬浮剂	easy to use - can be applied as drops with minimal friction, spread more easily than ointments - distribute well within ear cana, relatively prolonged contact time - less frequent administration than solutions 使用方便，扩散容易，接触时间长	still slightly occlusive but less so than ointments - suitable for purulent otitis 相比油剂结块较轻——适用于化脓性外耳炎

Topical Potency Of Corticosteroids 皮质激素的局部效力

Systemic side effects 副作用	Topical potency 局部效能		
	Potent 强效	Moderate 中等	Low 低效
Low 轻	Mometasone furoate 莫米他松 Betamethasone valerate 倍他米松	Hydrocortisone aceponate 氢化可的松醋丙酯	Fluocinolone acetonide 氟轻松 Prednisone (prednisolone) 泼尼松 Hydrocortisone 氢化可的松
Moderate 中		Triamcinolone acetonide 曲安奈德	
High 高		Dexamethasone acetate 地塞米松	Dexamethasone 地塞米松

默沙东动物保健，全球动物保健的引领者。我们的目标是通过可持续增长创造更多价值，以创新、高品质的动物保健产品、服务等综合解决方案，为兽医、农场主、宠物主人以及整个社会提供更卓有成效的动物疾病防治和解决方案，满足客户不断变化的需求，最终保护并改善动物的健康与福利。

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