Squamous Cell Carcinoma/Sarcoid (Ann Dwyer) Hot Topic Notes IEOC 2022

1. Are you recommending genetic testing for horses of breeds at risk for SCC? (Haflinger, Belgian draft horses, some other draft breeds).
    - A minority of attendees were sending hair samples to UC Davis to make informed decisions on the risk of breeding members of at risk breeds. After discussion some attendees said they would consider this in the future.
    - A smaller minority were advising the same analytics as a part of a prepurchase exam, or just as "information" for owners of at risk breeds
    - Test is available for $40 on UC Davis Genetics Lab website and owners are able to submit hair samples themselves
    - Dr. Bellone commented that it would be very useful to design research that tabulated treatment outcomes according to genotype
    - Dr. Knickelbein added Connemaras to the "at risk" breed list.

2. What clinical presentation prompts you to excise a third eyelid that shows a region of SCC? Do you do TE removals standing? Recommended follow up? Impression of recurrence rate?
    - The majority of attendees are removing the entire TE if there is evidence of neoplasia at this site. This surgery is most often done standing. Very few were closing conjunctiva; rather performing a simple amputation
    - Some were following surgery with PDT in the cornea +/- conj if there was evidence or worry about "seeding".
    - The concept of prophylactic TE removal for individuals who are homozygous for DDBL2 was brought up. Most were not ready to be this radical but all agreed that close vigilance is advised for these individuals. Some attendees have seen SCC present bilaterally on the TEs.
    - Most had not experienced complications such as retrobulbar fat prolapse. One person had, and remediation was uncomplicated.
    - Dr. Scherrer has published on long term outcomes of TE excision at U Penn and found a 25% recurrence rate but also said many of the cases presented late. Practitioners tended to see a very low recurrence rate due to early intervention.

3. What types of cases will you treat with cryotherapy? What unit(s) do you use, and what is your typical freeze/thaw protocol? Do you do any cryotherapy on the cornea?
    - Specialists were very comfortable freezing corneal surface whenever there is concern about neoplasia. They said the large size of the equine eye presents a "heat sink" so cryo sites thaw quickly and it is hard to cause harmful sequelae.
    - Most use one of the spray nozzles that come with the Brymill system. One person used probes of 1-3 mm diameter. Most did not cover the adjacent cornea. Some did cover adjacent cornea with Styrofoam cutouts.

- Specialists dealt with areas of limbal SCC or suspect SCC via keratectomy followed by cryo same day. Some covered with amnion or A Cell. Others left open to heal.

4. What drugs do you use as local injections to treat SCC (cisplatin/ 5 FU/ MMC/ Interferon/Anything else)? Describe dosing as a function of site and tumor volume, and any agents you mix with the injection (sesame oil, water). What interval between treatments and what # of treatments do you advise? Any tips for the procedure of injecting chemotherapeutic agents in the periocular region? What biosecurity precautions do you take when injecting these agents?
    - Some Universities have regulations prohibiting injectable chemotherapy (NC State, U Wisconsin, Auburn, several UK sites). Others allow it (U Penn, Cornell)
    - All who use injectable cryo take precautions with PPE for all handlers.
    - Cisplatin 1:1 with sesame oil was used most often by those doing injectable chemo. Dr. Lanois uses carboplatin sometimes—says it is effective but he uses in a ratio of Carboplatin 2:sesame oil 1, and commented that by the third injection he has had issues with tissue necrosis in a few cases.
    - Some others are using 5-FU for an injectable chemo agent. It may be helpful to add 1 ml of epinephrine to your bottle of local anesthetic (100 cc) to effect better vasoconstriction at the site. Inject as much fluid as the tissue will hold.
    - Most were advising an interval of 2-3 weeks between treatments, and advising 3-4 treatments. All agreed that it is rare to see adverse tissue reactions with either cisplatin or 5 FU
    - Immunocidin has been used for some sarcoids but can cause granulomatous reactions.
    - Dr. Neaderland has used mitomycin C compounded by Wedgewood pharmacy

5. What topical treatments do you use for lesions in haired skin, lesions in the conjunctiva, lesions on the cornea? (5 FU/MMC/steroids/Commercial products like Xterra/anything else?)
    - 5 FU used by many. Dr. Latimer has sprayed the injectable onto the tear film a few times per week while watching for tissue irritation. Most others using this ordered compounded 1% 5 FU
    - Some were using compounded MMC.
    - Schedules for the above two compounds varied, but trend was week on/week off for about 3 cycles. Most used 3-4x per day. One attendee administered liquid MMC through an SPL 3x/day for week on/week off schedule, 3 rotations.
    - A few attendees had managed low grade chronic SCC by applying 5 FU 2-3x per week long term (no breaks but infrequent application)
    - A few had used topical Aldara on lesions that were not close to the lid margin but warned that tissue reaction can be “ugly” prior to obtaining positive resolution.
    - Acyclovir is worth a try on small sarcoids
    - Topical NSAIDs are worth trying on eyelid areas of solar elastosis

6. Is anyone using photodynamic therapy for periocular tumors? Please comment on success rate/cost/challenges with materials/complications.
    - **There was VERY HIGH ENTHUSIASM for PDT among attendees** using this. Many lesions are amenable to excision followed by PDT. Attendees with a lot of experience included Drs. Nunnery, Lanois, Plummer, Bell, Moore
    - It is very difficult and expensive (often impossible) to obtain Visudyne but most are now using INDOCYANINE GREEN and the FOX laser system sold by An-Vision.
    - Some commented that if an extensive lid excision is required, that PDT seems to stimulate nerve and tissue regrowth
    - Many have performed keratectomies for various problems then followed with PDT. Sometimes the agent was "painted" on, other times injected.

7. Is anyone using electrochemotherapy or treating periocular tumors with radiation? Comment on success rate/cost/complications.
    - Some universities offer ECT. Variable feedback as to results. Most are performing under short term general anesthesia (Xylazine/Ketamine). U Tenn has done standing under heavy sedation. Dr. Scherrer said she tried it standing once and will not do again due to the effects of the voltage on the patient.
    - Some universities or referral practices offer strontium radiation. Duration of application was 6-7 min for older units; under one minute for newer minutes.

8. Do you advise systemic drugs for any of your cases (Piroxicam, Cox 2 inhibitors, corticosteroids?)
    - Some clinicians were using Cox-2 inhibitors as adjunct therapy for SCC.
    - A few people commented they have observed tumor shrinkage with piroxicam admin prior to surgery
    - A Cox-2 inhibitor may help with chronic management of SCC. However it is prudent to monitor blood chem 1-2x per year to be vigilant for hepatic, renal or GIT dysfunction
    - Meloxicam is used sometimes in the U.K. (Dr. Patterson)

ERU/HIK (Rachel Allbaugh): Hot Topic Notes IEOC 2022

1. Intravitreal low-dose Gentamicin questions:
    a) what horses will you advise intravitreal injection for

- Advised for performance horses in particular to avoid drug testing rules
- Many start talking about this early on as an option but are hesitant to perform if there is an early cataract and visual eye. Rapid vision loss would be devastating for a performance horse
- Many advise this for any ERU case and some if Lepto positive (>1:800) or snap positive

b) Tips for performing (Site, prep, sedation and anesthesia, source of Gentocin, needle G and length, syringe, concurrent meds)

- Most people use the preservative free formulation of gentamicin and techniques as directed in the published paper
- Few recommended doing an ocular ultrasound first to track retina status
- 10mg/ml from Amerisource

c) efficacy

- Good, respond quickly to get a quiet eye
- Better response if you intervene early
- Poorer response if more advanced disease
- Approximately 70% positive response when considering goal of quiet AND visual eye

d) duration of results

- When it works it is only done once most of the time, but a couple people have repeated an injection 1-2 years later with additional benefit
- Most felt it worked long term (2+ years)

e) complications

- Rapidly progressing cataract if there is any present beforehand
- Retinal degeneration up to 3 months later
- Retinal detachment dorsally from injection

f) do people taper fully or partially off meds following IVGI and how to taper off meds following procedure if so

- Everyone tries to taper down medications and some try to discontinue completely as a goal
- Taper off oral anti-inflammatory first then topical steroid
- Mild cases people feel they can get off meds

g) do certain cases or breeds do better or worse

- Apps with insidious uveitis do worse (what about Lp/Lp genetic status to explain?)
- This is most people's first choice and recommendation for posterior uveitis ("swamp water" vitreous). Usually this is Lepto/lyme/infectious
- Cheaper horses respond better :)

2. In your hands, is there a role for systemic corticosteroids in any of your ERU/HIK cases?

- When used as a first line treatment can get 1+ year control even with advanced cases
- Some feel this is a “steroid responsive” disease
- Dexamethasone 20mg tablets PO then taper
- Prednisolone 1mg/kg then taper to 0.5mg/kg—250-300mg PO SID for life in 10% of cases (last resort when can’t get off flunixin)
- Not used in any pony or in an overweight horse

3. Frequency of topical CCS, tapering protocols? When do you use NSAIDs instead of CCS?

- Topical steroid +/- NSAID TID-QID
- Taper off steroid as soon as possible to decrease fungal ulcer risk depending on region risk
- Subconjunctival methylprednisolone 20mg and repeat in 6 weeks either a full or half dose, give topical HA lubricant after this procedure

4. Do you advise genetic testing for any breeds or phenotypes?

- Most said no but knowing Lp status for breeding/prepurchase would be good and especially for planned biannual monitoring of horses that are homozygous

5. Has anyone found any treatment options to “cure” HIK once observed?

- No
- Most said be aware of bilateral disease development and monitor other eye if unilateral only disease
- Enucleation or formalin :)
- Bromfenac SID long term

6. Consideration of thermokeratoplasty to prevent bullae risk with severe corneal edema in HIK?

- Thomas feels 50% success in getting off all meds with early surgical intervention including keratectomy, photodynamic therapy and Gundersen grafts
- Gunderson grafts preferred by most when surgery indicated
- Thermokeratoplasty can help control bullae/comfort but more scarring of the cornea
- Corneal cross linking can help reduce edema (must remove epithelium)

7. Do you consider uveitis cases with pigmented keratic precipitates and no iridal depigmentation HIK?? Is this another variation of ERU instead?

- Most said yes and they feel it alters the conversation with the client about poorer prognosis
- "Pigment-losing iritis"

8. Immune boosting supplements?

- No for most and don't want to

Fungal keratitis (Erica Tolar) Hot Topic Notes IEOC 2022

1. Do you immediately recommend surgery for fungal keratitis or medical therapy? Which cases do you lean toward cutting vs medical therapy?
   - This depended on the lesion location for most. Deep or midstromal abscesses were usually cut right away
   - In the New England area abscesses are treated medically
   - In the Washington DC area everything goes to surgery regardless of the lesion-this usually comprises a standing superficial keratectomy, cryoablation and intrastromal voriconazole around and under the lesion
   - Huge axial lesions are treated medically at first because if they are taken right to surgery it eats the graft, people are variable on how long to treat medically before taking them to surgery. This varies from 48hr to 5-7 days
   - In the DC area 80% of the deep abscesses are fusarium
   - Everyone cuts the endothelial lesions no matter what
   - Some will place biosis when they do their standing keratectomy

2. When doing medical therapy do you have a multi-drug approach or single drug?

- In Kentucky multi-drug approach was usually done right away which always included voriconazole. The second anti-fungal was variable (natamycin, SSD, Miconazole)
- Some with do one topical anti-fungal (voriconazole) in addition to one oral anti-fungal (itraconazole or fluconazole)
- For oral fluconazole people use 14mg/kg one time and then 5mg/kg SID and they recommended monitoring liver enzymes
- One person will do subconjunctival voriconazole at initial presentation
- Two have tried luliconazole which is compounded by Meds for Vets but no conclusions have been made about this therapy yet
- All usually use broad spectrum therapy for ulcerative lesions but when there is a deep abscess some use an antibacterial and some do not
- In the UK eyelid cleaning and hygiene with dilute betadine is used
- Betadine 1:25 drops are administered for a 60 second soak

- Most use 1% voriconazole topically however some will do 2% or some variation between 1% and 2%
- Subconjunctival amphotericin (0.5mg/ml) was used by a few. The volume varied from 0.2ml to 0.5ml. Usually 1 injection was administered every 2-3 days for 3 injections. The conjunctiva will get thickened so it is advised if you may need to do a conjunctival graft don't do the injection in that location
- One used topical amphotericin but it was very irritating
- One has used terbenifine cream

3. What drug is your preference and what geographic location is your practice in?

- Favored drug in the US is voriconazole
- Across the pond this is expensive so it may not be used first
- In France voriconazole and amphotericin may only be administered in the hospital so they need to be sure if they even have a fungus before treatment
- Most feel climate change is causing them to see more fungus especially in areas you hadn't seen before and cases are more severe

4. How frequently do you administer anti-fungal medications?

- Majority administer anti-fungals every 2hr, some do every 4h aiming for a slower kill of the fungus
- One uses a Graseby MS26 syringe pump with a continuous infusion which is commonly combined with chloramphenicol and serum
- Mila syringe pump is also used
- Another is using a pediatric pump
- A few use compounded voriconazole ointment
- Most use eye ointments all together for one application every 4 hours
- Application is either done with a gloved finger or loading the barrel of a zero hub loss syringe and using the syringe for application
- SSD is used as a marker to help owners identify that they have gotten the medication in the correct place

5. Do you do repeated cytology to gauge response to therapy?

- Most repeat cytology to gauge response to therapy with ulcerative lesions, this varies from every 3 days to weekly
- Appearance of hyphae and number of hyphae are used to determine therapy

6. Do you do culture and if so where do you send culture and sensitivity? PCR?

- Not everyone does a culture
- Texas is the only lab doing a sensitivity and it is $$$
- One grows fungus in sterile saline in the sun at about 70 degrees and then will do MicrogenDx PCR for identification
- At university locations most use their in house laboratory
- Yale has a PCR-Susan Compton's lab. susan.compton@yale.edu for information
- One person mentioned a Dr. Fungus website which has pictures and sensitivity information after an ID is made on your fungus.

https://drfungus.org/

7. Do you do intrastromal injections for fungal keratitis? If so, describe method, regional anesthesia, syringe and needle choice, drug concentration. Anything besides voriconazole? Frequency?

- All do an auriculopalpebral block, some frontal
- Subconjunctival carbocaine in the region of the injection
- Topical lidocaine ophthalmic gel
- One did amphotericin in the cornea-it is terrible
- Most do 5% voriconazole for an intrastromal injection
- One adds 8ml to the voriconazole for the intrastromal injection and then uses the rest topically at that higher concentration
- Repeat injections every 3-7 days

8. How do you store and administer topical voriconazole—in glass, drawn up right before administration? How long will you keep voriconazole frozen then use it?

- All keep it refrigerated
- In the UK mostly and a few in the US divide up the entire bottle of 1% voriconazole into 5 aliquots and then freeze and pull out each one as needed
- Some keep for only 30 days
- Some keep for 60 days
- Some keep until bottle is done

9. Do you "stack meds" in your SPL tubes for treatment or give drugs one by one chased by air?

- Half stack, half chase with air
- Ofloxacin, voriconazole, serum, atropine are the most common to mix when stacking meds
- Volume of meds used in an SPL ranges from 0.05ml to 0.1ml to 0.2ml; some feel that the lower the volume the less tearing produced with administration and less washout of the medication, also more comfort to the horse
- One recommended Exel brand, zero hub loss syringes to further cut down on medication waste

10. What crazy thing have you done or tried to beat fungus?

- Dr. Tolar, Nunnery and Latimer have all done cryotherapy
- Cross linking multiple times in one day or on multiple sequential days
- Amnion drops through the SPL q2h, recommend waiting 15-30 minutes before giving another medication and ideally waiting and giving this medication last
- Magic wand :)
- Other random pearls:
    - using round cat toys as ear plugs
    - when doing a PK or filling a large defect with donor cornea don't cover it with conjunctiva
    - Topical NSAIDs if can't do oral

IMMK (Sarah Czerwinski) Hot Topic Notes IEOC 2022

1. What is your first-line therapy for suspected IMMK:

Topical steroids SID-TID:
-Neopolydex 0.1% ointment
-Dexamethasone ointment
-compounded Stokes to avoid using topical antibiotic chronically

Topical NSAIDs SID-TID:
-NSAIDS favored if concerned about corneal ulceration and for endothelial IMMK
-Diclofenac ointment 0.1%
-many favored combining with DMSO, not using more than BID due to risk of blepharitis
-Nevanac BID-TID
-$250-350 in US, from Canada $50 for 3mL bottle (similar effect to bromfenac)
-better penetration through intact epithelium
-Bromfenac
-0.09% commercially available, Goodrx coupon to help with cost
-1% ointment compounded from Saveway Pharmacy $170/10mL tube

Topical immune-modulators:
-as sole therapy, but frequently combined with topical steroids or NSAIDs
-Cyslosporine SID-TID
-Optimmune 0.2%
-1% ointment compounded
-2% solution compounded
-Tacrolimus 0.03% ointment compounded BID
-superior to cyclosporine for some members
-many had concerns about development of corneal lymphoma specifically with tacro

Other drugs:

-Mitomycin C
    -compounded topical
    -as first line or following keratectomy once epithelialized
    -can be irritating
    -different dosing frequencies used
        -BID x 5-7 days, off 2 days, repeat
-Hydroxyzine PO
    -compounded powder
    -500mg once daily
    -especially for subepithelial IMMK, horses with history of hives, allergies
    -in additional to topical medications, but will work alone for some horses

2. How do you manage endothelial IMMK?
    -NSAID bromfenac or nevanac thought to be superior
    -many find episcleral implants useful in these cases
    -discussion about the penetration of cyclosporine to the anterior chamber
    -some favor suprachoroidal implants in addition to episcleral implants
    -Gundersen flaps performed by some

3. What alternative therapies do you use either as first-line line therapy, or for refractory cases?

Episcleral cyclosporine implants:

-mixed opinions about how long to pursue medical therapy before placing implants
    -many wanted to see positive response to therapy with topical CSA before placing implants and continued topical therapy for up to 2 months before placing implants; others felt that that was not necessary
-generally favored for superficial stromal cases and endotheliitis
-many feel effective and are using to decrease the frequency of topical medications
-replace every 1-2 years, do not remove old implants
-regarding placement:
    -2, 3 or 4 implants per eye – all in 1 dorsal pocket, or 2 dorsal 2 ventral
    -a technique to facilitate placement was described:
        -using implants cut in half, and then taking a 1mL syringe with the end cut off, coating the inside of the syringe with lubricant, loading the implants and then injecting them into the pocket

Keratectomy:
-for superficial and mid-stromal IMMK
-especially if history of ulceration
-many members report using keratectomy following brief topical therapy, or in cases where they are not controlled with cyclosporine implants
-overall opinion is that keratectomy is very effective at controlling disease and chronic topical medications often not necessary
-most are performing with standing sedation
-different techniques for local anesthesia described:
    -subconjunctical local anesthetic
    -many prefer retrobulbar block due to the advantage of preventing globe movement
    -10mL lidocaine
-many prefer the horse to be off of topical medications beforehand
    -time off meds before surgery ranged from 5 days to 6 weeks
    -reasons for this included:
        -concerns about delaying healing
        -missing lesions if infiltrates suppressed by medications
        -to allow epithelial cells to complete their maturation cycle
-different techniques were described:
    1-removal of the primary lesion, with or without removing all blood vessels
        -concern for recurrence at periphery if vessels not all removed
        -if lesions deeper than 50% of corneal thickness some members will suture a graft (SIS or Acell) to stabilize the cornea
    2-entire cornea limbus to limbus at level of infiltrate even if cornea appears normal
        -this was described for depths of up to 50%
    3-small peripheral keratectomy close to lesion, leaving abnormal tissue has resulted is clearing of the remaining cornea for some
-some are submitting keratectomy samples for histopathology
    -fairly significant concern for development of corneal lymphoma and many have observed this
        -keratectomy was curative in some cases, some treated with MMC, some were enucleated with limited follow-up

PDT:
-with IG injected intrastromally and diode laser – fox laser has specific protocol for IMMK
    -some members have purchased the Fox laser with diffuser tip $17-19000
-standing
-for refractive cases or as first line
-very effective and often continued topical meds not required
-complications discussed:
    -melting of cornea requiring conjunctival graft
    -chronic green staining of cornea

Stem cell therapy:
-subconjunctival
-allogenic
    -source T.K. Pope from Colorado
    -single injection of 10 million cells
    -1cc syringe, 22g needle, subconjunctival lidocaine for analgesia but not in area of SC injection
    -off of anti-inflammatories 2 days prior, none afterwards
    -more reaction 2 weeks later (swelling, etc), then at 2-3 weeks post-injection keratitis improves significantly
    -10 cases with stromal IMMK

4. How do you deal with IMMK horses that also develop calcific keratopathy?

-rx EDTA ointment SID-QID
-diamond burr debridement
    -with or without contact lens (only in horses with SPL to aid in retention – Equus blue tinted discontinued, no tarsorrhaphy)
-EDTA debridement:
    -3mL edta tubes 0.4mL sterile water
    -transfer to 4 more tubes
    -debride with soaked cta

5. Do any other factors influence your prescribed therapies?

-Warmbloods overrepresented
-Prevalence seems to have increased in recent years – why??
    -effect of environment, genetics, correlation with other immune-mediated conditions
    -effects of stress, shipping
-Seasonality – worse in spring and fall, some patients can be off of medications in fall

Business "Paying the bills" (Brittany M. & Carrie B.) Hot Topic Notes

Medical record software or paper

- Merlin
- Avamark - entering notes and photos after the visit
- DVM max - entering notes and photos after the visit
- Impromed - entering notes and photos after the visit
- Cornerstone - entering notes and photos after the visit
- Ezyvet or vetradar
- Vision Records on laptop, considering iPad.

- Paper + carbon copy completed on site with fill in the blank preprinted discharge notes for various conditions. Carbon copy for client and scan original copy at later date for digital storage.
- Editable PDF on ipad. Single document with entire medical record that various combinations of pages are shared with client or referring veterinarian.
- Dictation. Some individuals utilize dictation and have either onsite or offsite personal to write report.
- Google documents, google forms (fillable that populates into spreadsheet), google photos, google calendar. Can be time consuming but complete.
- Microsoft word and associated programs or apps. This is also used but less frequently than Google.
- Dropbox with useful searchable naming scheme for photos and documents
- The referral letter is considered the medical record for a portion of our members.

Advertising and marketing

- Most had websites and did not do advertising or marketing beyond this rather relied on word of mouth. Some stated that their availability to referring veterinarians for unofficial consults was their marketing and a very useful practice builder.

Communication

- What's app - used for communication and keeps record of conversations
- FB messenger - creating short video of DVM with patient, findings and recommendations and sending to client via FB messenger. Developed this during early COVID and is continuing it. Probably decreases additional conversations with other family members about patient's condition.

Billing considerations

- Exams ranging from $200-500+ for new exams, some prepurchase $600, almost all rechecks less than initial. Urgent exams as much as 3 weeks out have additional fees.
- Probably fairly even split between those whose exam includes ophthalmic diagnostic tests and those who tack them onto the exam.
- Most bill after the exam but a portion take or hold credit cards prior to examination; usually when booking the appointment
- Probably fairly even split between those that bill for themselves and those that had hosting clinic billing for them. Hosting clinic bills office call primarily but one had percentage of fees.
- Financial software: Quick books/intuit credit card, square, payjunction, venmo. Wave is free (Europe) and is similar to quick books, takes online payments and can do tax returns with this.

Efficiency hacks

- carbon copy exam forms
- google expander or icloud text replacement to make "shortcuts" for commonly typed phrases, paragraphs, sx reports etc

- prepared templates

To bill or not to bill for consultation vet to vet

- Work/life balance, ethics. Is it our obligation to provide these free of charge? Charging for veterinarian to veterinarian consults is a paradigm shift.
- Maintain paper trail. If written report provided then some are stating along the lines of "recommendations are solely based on photos and information provided by primary/attending veterinarian". Many of us see mis/information from these consults documented in the medical record of the referring veterinarian, ex: "called Dr. DACVO who suggested beginning latanprost 40x a day"
- Guardian Vet Connect App for Telemedicine & Consults is currently being used by Dr. Meredith Voyles for paid consultation. Allows group conversation, attachment of documents and photos and does billing for a fee.
- Some find text messaging between veterinarians very convenient while others find it invasive.

The pros and cons of paid veterinarian to veterinarian consults

- Veterinarians work with you to accomplish a more complete examination which leads to them doing better examinations, and sending better summaries (vs sending a picture and asking, "What is this?")
- Compensation for our time
- Better care for horses that cannot get to us for an examination in person
- Often veterinarians pass this fee onto the owners – many experiences where owners jump at the opportunity to pay for their primary veterinarian to get a specialist opinion
- +/- Seems to limit consults from veterinarians who never intend to refer

Management of medication inventory

- Probably even split between people dispensing medication inventory versus those relying on hosting practice to do so or direct shipping from compounding pharmacy to owner.

Some general tips

- Utilize technicians if you have one as much as possible
- If possible, have someone call to touch base with owners the day following the appointment appears to yield increased owner satisfaction. They can ask someone who is not the doctor those questions they were afraid to ask, or sometimes they divulge additional information they were unable to say.