

AAH Daytime Parvo Hospitalization Protocol

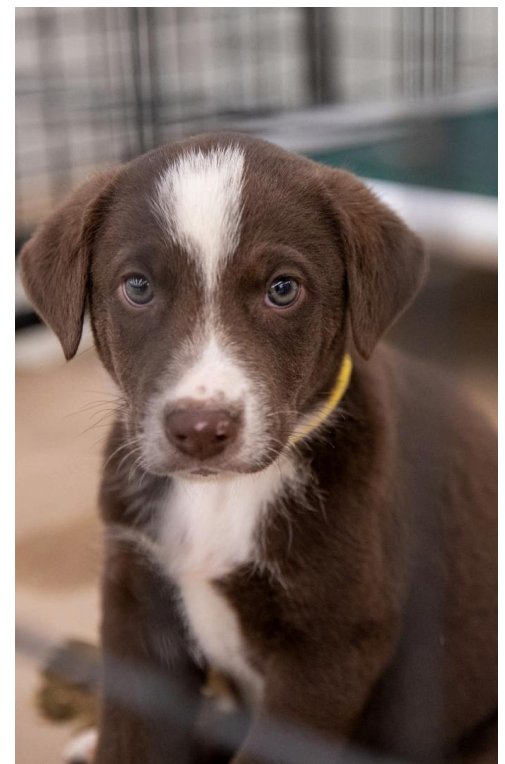


Protocol Foundations

- Treatments are clustered between the hours of 8 AM and 10 PM
- Provides mainstay of therapy: intravenous fluids, antibiotics, and supportive care
- Treatments that are less resource intensive (like Convenia - one time injection or Baytril - once a day injection) are prioritized

Benefits of this approach

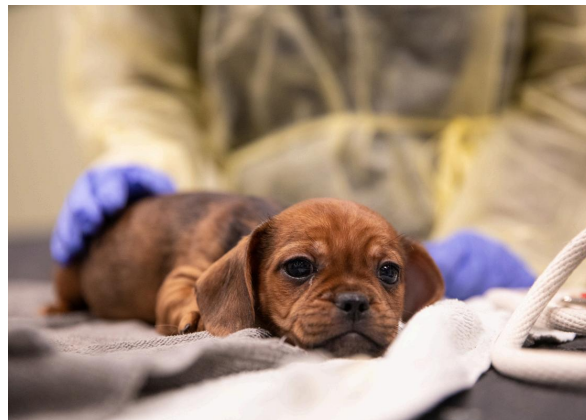
- Provides a spectrum of care approach to treating canine parvovirus with high survival rate
 - Enables treatment of dogs critically affected with parvovirus that fail outpatient therapy in facilities with limited overnight capabilities
 - Lower cost of treatment vs. specialty care
- Helps owners that are unable to follow the outpatient parvo protocols
 - Owners that cannot administer treatments or perform at-home monitoring
 - Owners unable to visit clinic once or twice a day
- Helps train and empower new doctors and nurses
- Animals receive treatments and monitoring during the day when doctors are on-site or more easily reached
- Promotes circadian rhythm by letting patients rest at night
- Frees up overnight staffing for more critical cases



Parvovirus Protocols: Inclusion Criteria

Daytime Hospitalization Protocol

If patient fails outpatient and/or client cannot commit to daily rechecks for outpatient protocol, we recommend daytime hospitalization protocol for all patients that are:



Admitted before 2pm



Admitted after 2pm but hemodynamically stable by evening (normotensive with intravenous fluids)



Normoglycemic



Hypoglycemic on intake but eating and able to maintain blood glucose concentration off supplementation by evening



When overnight staffing/capacity for care does not permit 24 hour hospitalization protocol

DATE: _____

WEIGHT: _____ kg

PROBLEM LIST: Parvovirus (Daytime Hospitalization Protocol)

SPECIAL CONSIDERATIONS: Isolation

DOCTOR: _____ DNR / CPR

Treatments:	Notifications parameters:	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7
Weight	> <																								
Temperature	> <																								
Heart rate	> <																								
Respiration rate	> <																								
Blood pressure	> <																								
Mentation check	Dull, seizure* *If seizure, give 0.5 ml/kg dextrose (diluted 1:2 with LRS) IV & notify Dr.																								
BG	> <																								
Cerenia _____ mg IV SID (1 mg/kg)																									
Pantoprazole _____ mg IV BID (1 mg/kg)																									
Baytril _____ mg IV SID (10 mg/kg) if concern for sepsis																									
QATS-1 or I-Stat SID (circle one)																									
Check and flush IV catheter																									
Let out to void and note urination/ notify if no urination in 12 hours																									
Feed and note app / food choice:																									
Fluids / Constant Rate Infusions:		8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7
LRS + _____ mEq KCl/ 1 L + _____ % dextrose @ _____ ml/hr (_____ ml/kg/day)																									
LRS SQ fluids (40 ml/kg SQ), give Erythromycin 1 mg/kg IV once if patient on Reglan, and wrap IVC for overnight																									
Follow "Parvo Bolus Protocol" [if BP ≤ 80, vomiting, regurg, or +++ diarrhea] Yes or No (circle one)																									
Follow "Parvo Hypoglycemia Protocol" [if BG ≤ 70] Yes or No (circle one)																									

IVC: DATE, _____, TYPE _____, SITE _____ INIT, _____ Drs: if catheter out: REPLACE / DO NOT REPLACE Techs: MARK HERE IF REPLACED

IVC: DATE, _____, TYPE _____, SITE _____ INIT, _____ Anticipated discharge date: _____

TIMELINE	8	10	12	2	4	6	8	10	12	2	4	6
APP/VOIDS												
Appetite/food eaten												
Bowel movements												
Urination												
Vomit/regurgitation												
VITALS												
Pain score (0-4)												
Weight												
Heart rate												
Respiration rate												
Temperature												
CRT / MM												
ARTERIAL BP												
Method												
Cuff size												
Systolic												
Diastolic												
Mean												
Heart rate												
SpO2												
SpO2 / FiO2	/	/	/	/	/	/	/	/	/	/	/	/
QATS-1												
BG < >												
PCV < >												
TS < >												

NOTES:

Recommendations for Intravenous Fluid Therapy: Note that all these are all estimated calculations; fluid therapy needs to be assessed dynamically and tailored to the individual patient.

- Initial rate should be based on maintenance + dehydration requirements. Example: 5.0 kg puppy that is 6% dehydrated with fluid deficit to be replaced in 24 hrs:
 - Maintenance = insensible losses + sensible losses = 120 ml/kg/day = 600 ml/day = 25 ml/hr (Note: pediatric patients have maintenance requirements that are 2x adult).
 - Dehydration = 5 kg X 0.06 X 1000 = 300 ml/day = 12.5 ml/hr
 - Total IVF rate = 25 + 12.5 = 37.5 ml/hr ~ **38 ml/hr** (~182 ml/kg/day = 912 ml/day)
- Once the patient is euhydrated, the patient can be placed on maintenance fluid rate:
 - Puppy: 120 ml/kg/day; Adult dog: 60 ml/kg/day; Kitten: 90-100 ml/kg/day; Adult cat: 45-50 ml/kg/day
- Once a patient is euhydrated, eating, and has no ongoing losses, IVFs can be tapered or discontinued.

Normoglycemic Daytime Protocol: For patients that are normoglycemic, calculate IVF rate to be given for 14 hours (8 AM-10 PM; no IVFs from 10 PM-8 AM) and SQ fluid amount at 10 PM.

- A 5.0 kg puppy that is 6% dehydrated with fluid deficit to be replaced in 24 hour requires **912 ml/day = 182 ml/kg/day**.
- Calculate SQ fluid amount (40 ml/kg). For a 5 kg puppy, this is **200 ml SQ**, which will be given at 10 PM.
- To determine daytime IVF dose, subtract SQ fluid amount from total daily requirement: 912 ml - 200 ml = 712 ml / 14 hours = 50.8 ml/hr ~ **51 ml/hr** from 8 AM until 10 PM.

Parvo Bolus Protocol: If a patient has BP ≤ 80 mm Hg and/or ≥ 2 episodes of vomiting, regurgitation, or +++ diarrhea, administer IVF bolus and notify Dr.

- Puppy: 30 ml/kg IV over 15 minutes; Adult dog: 15 ml/kg IV over 15 minutes

Parvo Hypoglycemia Protocol: If BG ≤ 70, then give 0.5 ml/kg dextrose (diluted 1:2 with LRS) IV slowly over 5 minutes, add dextrose to IVF (see chart below), notify DVM, and recheck BG in 1 hour

% Dextrose in Current IVF	How much dextrose to add?
0	2.5%
2.5%	5%
5%	7.5%
7.5%	Notify DVM