

### INTRODUCTION

Uveodermatologic syndrome (UVD) is a rare disease of the dog characterized by association of clinical signs of uveitis and cutaneous signs of depigmentation (vitiligo and poliosis)  
The Vogt-Koyanagi-Harada (VKH) disease is a bilateral panuveitis associated with dermatological alterations, central nervous system and auditory system involvement in humans  
Unknown etiology: virus infection??

### OBJECTIVES

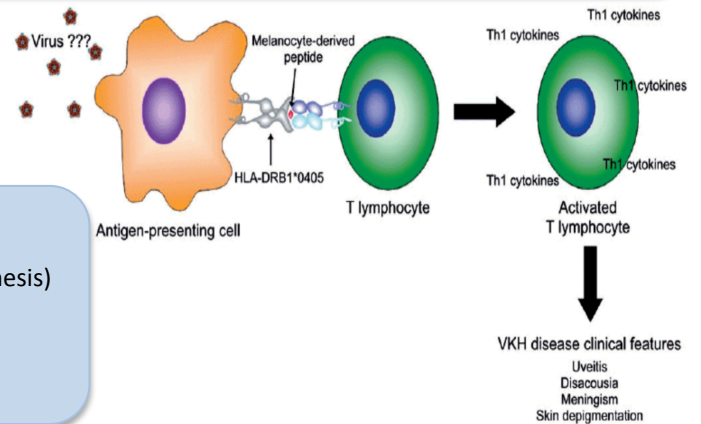
- Bibliographic review of two similar diseases in different species (dogs & humans)
- Comparative study
- Describe similarities and difference

### PATHOGENESIS

- Autoimmune aggression against melanocytes
- Ag of the immune response: Tyrosinase protein (ez melanin synthesis)
- Cellular immune response-> LT
- Genetically susceptible individual

VKH: Altered expression of HLA (human leukocyte antigens)

UVD: Altered expression of DLA (dog leukocyte antigens)



### UVD syndrome

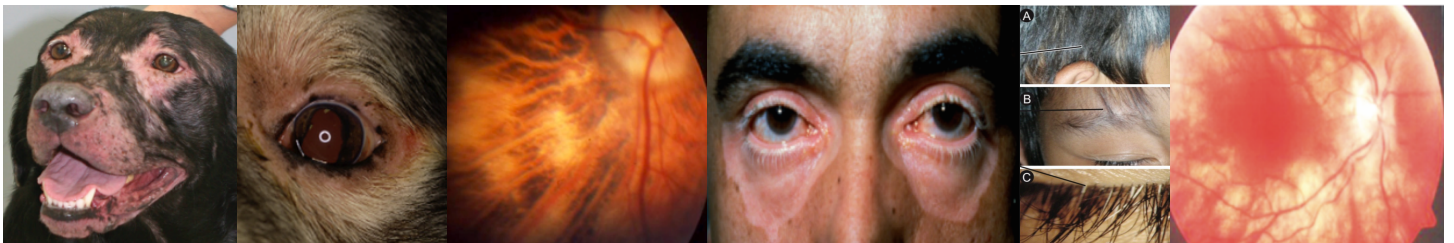
- Most of cases Japanese and northern breeds: Akita (80%), Siberian Husky and Samoyed. Others breeds described
- Age: 6 months and 6 years old
- No apparent sex predilection
- Anterior uveitis or bilateral panuveitis. OF: chorioretinitis + depigmented lesions RPE and choroid
- Vitiligo, poliosis and symmetrical alopecia: periorbital and nasal regions, eyelids and lips
- Neurological and auditory signs exceptional in dogs

### VKH disease

- Darkly pigmented races (Orientals, blacks & Hispanics)- Adults between 20 and 50 years old
- Both genders (women +++)

4 stages:

- **Prodromal**: influenza symptoms + tinnitus
- **Acute**: bilateral granulomatous panuveitis with RD, neurological disorders and disacusia.
- **Chronic**: vitiligo, poliosis & alopecia: face, neck, trunk and eyelids. OF: sunset glow fundus
- **Chronic recurrent**: Episodes of uveitis months or years after the acute stage



### DIAGNOSIS

- Clinical Dx: Association of ocular & cutaneous signs / breeds
- Skin biopsy: Lichenoid infiltrate of epidermis: histiocytes, lymphocytes, plasmocytes and giant cells & pigmentary Incontinence.
- Clinical criteria by the American Society of Uveitis in 2001
- 3 types of VKH: I o probable, II o incomplete, III o complete
- Lumbar puncture: pleocytosis in CSF

**ASSOCIATION OF OCULAR, CUTANEOUS (NEUROLOGIC AND AUDITIVE IN HUMANS) SIGNS IS PREDICTIVE OF THESE SINDROMES**

### TREATMENT

- Systemic and topical corticosteroid: Prednisolone/ Dexamethasone/Triamcinolone (SC, IV)
- Refractory cases and side effects: Immunosuppressive drugs: Cyc A, Azathioprine, Cyclophosphamide, Tacrolimus, Methotrexate
- Long term treatment: 6-8 w in dogs / 6-12 months VKH type 1 & 2; + 1 year type 3

### PROGNOSIS

- Poor prognosis in dogs. Frequent recurrences
- Complications: Cataracts, secondary glaucoma, RD, BLINDNESS
- VKH: Good prognosis 50% of patients
- Cataracts, glaucoma and choroidal neovascular membranes

### CONCLUSIONS

- Great similarities between both diseases (etiology, pathogenesis, clinical signs, diagnosis and treatment)
- Interest of the dog as an animal model for the study of VKH disease and vice versa
- The term UVD is the most appropriate for the dog due to differences with VKH disease
- Early diagnosis in humans and late in dogs
- Importance of early treatment to avoid complications