

VIRAL INFECTION

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- Viruses :- are obligatory intracellular parasites , composed structurally of a central core of nucleic acid & a protective coat (capsid) & in certain groups of an outer envelope .
- Two main groups of viruses are distinguished DNA (parvo , papova , adeno , herpes , & pox virus) , & RNA viruses (picorna , toga , ortho , reo ...etc) .

HERPES VIRUS

- **Herpes virus** :- a double stranded DNA virus that replicate in the nucleus , it produce a latent life long infection which may be intermittently clinically apparent .
- **Viruses of this group are :-**
 1. Herpes simplex virus type 1 & 2 .
 2. Epstein-Barr virus .
 3. Cytomegalo virus .
 4. Varicella-zoster virus .
 5. Human herpes 6 , 7 , 8 (kaposi sarcoma associated) .

HERPES SIMPLEX (HSV)

- HSV infection are caused by 2 different types (HSV 1 & 2), HSV-1 is generally but not always associated with oral infection & HSV-2 with genital infection .
- Both types produce identical pattern of infection , virus passes through 2 phases :-
 1. Primary phase :- after which the virus become established in the nerve ganglion .
 2. Secondary phase :- charac. By recurrent disease at the same site .
- Genital type recur more frequently than the labial type .

ORO-LABIAL HERPES INFECTION

- Primary infection (gingivo stomatitis & pharyngitis) are the most frequent manifestation of first episode infection.
- Virus may spread either by :-
 1. Droplet infection .
 2. Direct contact .
 3. Saliva or cervical secretion from patient with no evidence of active infection .

- It occurs most commonly between the age 1-5 years , charac by more sever prodromal symptoms (localized pain , tender lymphadenopathy , fever , generalized ache , headache) than in the recurrent disease which take about 12-24 hours .
- Incubation period 3-12 days .
- Clinically there is grouped vesicles on erythematous base which subsequently erode . Lesions last 2-6 weeks unless secondarily infected .
- **Recurrent infections** :- predisposing factors are
 1. Local skin trauma (UV light exposure , chapping , abrasion)
 2. Systemic changes (mense , fatigue , fever)









- These factors reactivate the virus which then travel down the peripheral nerve to the site of initial infection & causes recurrent infection . Prodromal symptoms is less sever & last about 2-24 hours .
- Skin lesion chara. by grouped vesicles on erythematous base which take about 10 days to heal .

Treatment :- it is a self limiting disease we treat to relieve discomfort & promote healing .

1. Non-specific topical agent :- these include cool compresses , lubricating cream .
2. Specific topical treatment:- penciclovir cream, acyclovir cream. These drugs shorten episode of herpes labialis by few hours or aday.
3. Systemic treatment :-

This drug (acyclovir) :-

- . Decrease new lesion formation .
- . Decrease duration of viral excretion .
- . Promote rapid healing .

Subsequent recurrence rate not influenced by acyclovir .

	acyclovir	famciclovir	valacyclovir
First episode	200 mg 5times/day for 7-10days	250mg tid for7-10 days	1 gm bid 7-10days
Episodic, recurrent intermittent therapy	200 mg 5times/day for 5 days	125mg bid for 5 days	500mg bid for 3days

Clinical types of primary infection

1. Herpetic gingivostomatitis.
2. Herpetic kerato conjunctivitis.
3. Herpetic whitlow.
4. Primary HSV-1 genital.
5. Eczema herpeticum.



VARICELLA

- A highly contagious viral infection caused by VZV . Transmission is by air droplet or contact with vesicular fluid . Patient are contagious 2 days before appearance of the rash , until all the lesion have crusted .
- Incubation period 9-21 days , average 14 days . One attack give life long immunity .
- Clinically charac. By prodromal symptoms mild or absent in children & sever in adult , the rash is polymorphic (in all stage of evolution) it start as red papule then vesicle then crusted lesion , every lesion took about 24 hours , it is mainly trunkal distribution , mucus membrane could be affected .







VARICELLA

Complication :-

1. Skin :- secondary bacterial infection .
2. Neurological :- encephalitis , Reye`s syndrome .
3. Respiratory :-pneumonia .
4. Liver :-hepatitis .
5. Mild thrombocytopenia .

Treatment :-

It is a self limiting disease , only symptomatic treatment .

Antipyretics,for pruritis such as bland antipruritic agent & antihistamine . Antibiotic if there is secondary bacterial infection , acyclovir for immunosuppres & adult .varicella vaccine. Varicella zoster Ig.

HERPES ZOSTER (Shingles)

acute viral infection generally involving the skin of a single dermatome . People at all ages are affected , but incidence increase with age .

Etiology :- HZ result from reactivation of varicella virus that entered the cutaneous nerve during episode of chicken pox , traveled to the dorsal root ganglia & remain in a latent form.

Predisposing factors (these factors increase severity but not incidence) these include :- increasing age , immunosuppressive drugs , lymphoma , fatigue , emotional stress , & radiation therapy .

HERPES ZOSTER

Clinically it passes through 2 phases :-

1. Pre eruptive pain (pre herpetic neuralgia) :- pain precede rash by 4-5 days either as itching or burning localized to the dermatome . Pre eruptive tenderness , hyperesthesia is a useful predictive sign .
2. Eruptive phase :- in which there is successive crops of vesicles on erythematous base continue to appear for 7 days localized to a single unilateral dermatome , dermatome up & down could be affected , it take about 2-3 weeks to clear up .









HERPES ZOSTER

Syndrome of herpes zoster :-

- Ophthalmic zoster :- ophthalmic branch of trigeminal nerve .
- Ramsay-Hunt`s syndrome :- geniculate ganglion .
- Sacral zoster :- S2 , S3 , S4 dermatome causing urinary retention , hesitancy or neurogenic bladder .

Treatment:-

- Topical therapy :- wet compresses .
- Systemic therapy :- analgesic to relieve pain of acute herpetic neuralgia & nerve block carbamazepin , amitriptylin & gabapentine.
- Systemic antiviral : acyclovir in a dose 800 five times daily for 7-10 days to decrease pain . It is more effective when started in the 1st 48 hours of infection .

MOLUSCUM CONTAGIOSUM

- A common benign viral disease of the skin & mucus membrane caused by DNA pox virus .
- Incubation period 2-7 weeks .
- Mode of transmission :- primarily by person to person spread & sexually transmitted in adults & sexual abuse in children .
- Clinically charac. by a pearly to flesh colored papule dome shaped with central umbilication , any site could be affected except palm & sole , & +ve koebner phenomenon .







MOLLUSCUM CONTAGIOSUM

Treatment :- most of the lesions are self limiting & clear spontaneously ; 6-9 months & treatment must be individualized

1. Curettage with or without anesthesia .
2. Cryotherapy .
3. Tretinoin therapy .
4. Salicylic therapy .
5. Laser therapy for genital lesion with CO2 laser .

WARTS (VERRUCAE)

- A benign epithelial proliferation of the skin & mucus membrane that result from infection with human papilloma virus (HPV) papova group. These viruses do not produce acute signs & symptoms , but induce slow growing lesions that can remain latent or sub clinical for long period of time .
- Incubation period is between 2 weeks – 9 months average 2 months .

Etiology :- HPV which is DNA virus . More than 150 different genotypes of HPV have been identified by recombinant DNA technology .

Mode of transmission :- by direct contact in to a viable epidermis through a defect in the epithelia (trauma or micro trauma) .

WARTS

Clinical feature :- are usually classified by their clinical location & morphology .

In general it is charac. By dome shaped , gray brown , hyperkeratotic growth . Their number varies occurring singly or in groups .

It has positive koebner phenomenon .

Clinically it classified in to :-

1. Common wart .
2. Plane wart .
3. Filiform wart .
- 4- Digitate wart .
- 5- Planter wart .
- 6- Ano-genital wart (condyloma accuminata or venereal wart)











4.









A.



C.





WARTS

Treatment :- lesion may resolve spontaneously after months – years presumably due to CMI . Treatment either could be chemical or surgical , these are :-

1. Keratolytic as salicylic acid 20% – 40% .
2. Tretinoin topical for plan warts .
3. Cauterization & surgical excision .
4. Cryotherapy with liquid nitrogen or CO2 .
5. Podophylin 25% .
6. Bleomycin intralesional .
7. Alfa INF intralesional .
8. CO2 laser . 9- TCA topical . 10-topical imiquimod