



What's New in the Treatment of Common Viral Illnesses?

Viral illness is commonly but not always benign and untreatable. Symptoms of influenza, chickenpox, and shingles may significantly improve with early diagnosis and therapy. There is evidence that Bell's Palsy may be of viral etiology. Possible effective remedies for the common cold and issues of contagion will be addressed.

- Discuss the therapies for influenza, chickenpox, and shingles.
- Discuss the new etiology and management of Bell's Palsy.
- Discuss the treatment of the common cold.

MO-57
Monday, October 11, 1999
12:30 PM - 1:25 PM
Room # N208
Las Vegas Convention Center

**Research: Bayer, Viropharma, Lilly, Ortho-McNeil*

FACULTY

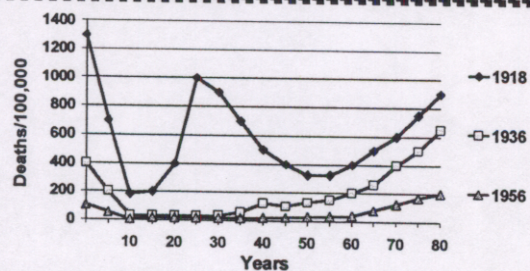
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What's New in the Treatment of Common Viral Illnesses?

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Influenza Mortality and Age During Three U.S. Epidemics



H5N1 Influenza A 1997

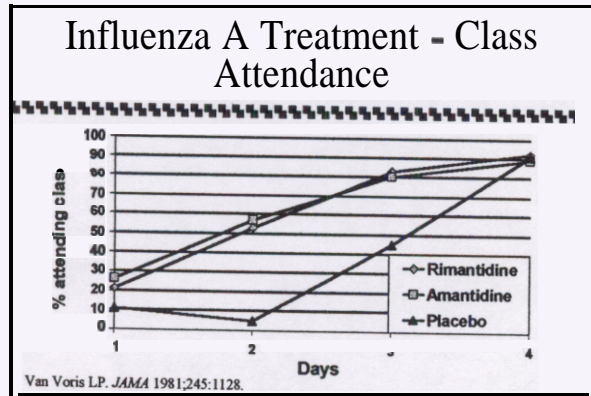
- 18 cases May-Dec 1997
 - 11 with pneumonia
 - 8 required ventilator
 - 6 died
- Case-control studies:
 - visit to poultry farm or shop
 - undercooked chicken
 - not cleaning knife
- One HCW without poultry exposure

Influenza A - Why Don't We Treat It?

- . MD dx 60-80%, bedside agglutination ↑
- . Treatment effective (48 hrs of onset)
- . Reduce symptoms 1-2 days
- . Amantidine - CNS side effects
- . Rimantidine 200 mg QD (100 mg > 65)
- . Contraindicated in pregnancy

Influenza - It's Not Just Any Cold

- . Abrupt onset
- . High fever
- . Headache
- Myalgia
- URI symptoms and cough
- Peds: GI, seizures, croup



Adverse Effects of Amantidine vs. Rimantidine In Elderly NH Patients

	Amantidine	Rimantidine
AE's(%)	16.6	1.9 (p<0.001)
Confusion (%)	10.3	0.6 (p<0.001)
D/C drug (%)	17.3	1.9 (p<0.001)

Keyser LA. 38th ICAAC, San Diego 1998

Late Breaker - Oral Zanamivir for Influenza

1,256 subjects

	Placebo	
Symptom duration (d)	6	7 (p=0.012)
At risk subset(d)	5.3	6 (p<0.016)

Osterhaus A. 38th ICAAC, San Diego 1998

Late Breaker - Oral Zanamivir for Influenza

Adolescents > 12 years and adults

	Symptom duration (d)	
	Zanamivir	Placebo
Intent-to-treat (n=455)	6.5	5.0 (p=0.011)
+ Influenza (n=321)	6.0	4.5 (p=0.004)
High risk (n=76)	8.0	5.5 (p=0.048)

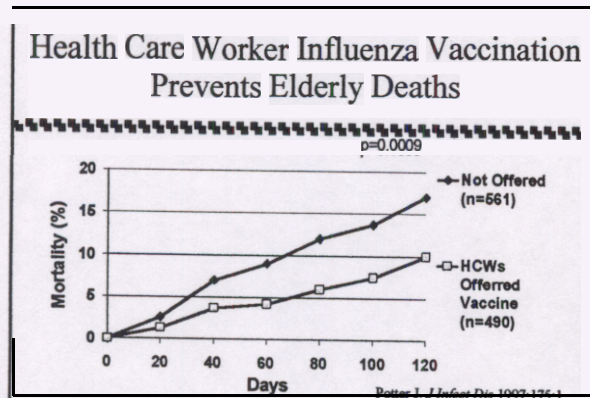
Silagy CA. 38th ICAAC, San Diego 1998

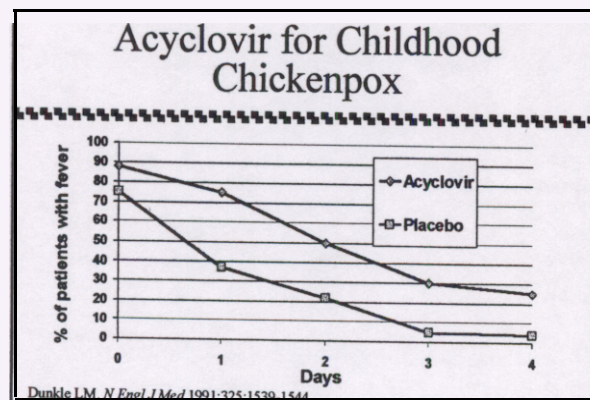
Late Breaker - Oral GS4 104 for Influenza

Ill < 36 hours. adults 18-65 years, 60% influenza
629 subjects

	GS4104	Placebo
Symptom duration (d)	2.9	4.3 (p=0.0001)
Illness severity score	611	962 (p<0.0001)
Bronchitis/sinusitis (%)	10	18 (p=0.017)

Treanor JJ. 38th ICAAC, San Diego 1998





Chickenpox: Treatment Recommendations

- . AAP: only adolescents, chronic skin/lung disease, aspirin (20/kg QID not > 3,200 mg/d)
- . Adults: no consensus
- . Pregnant, smokers
- . Immunowmpromised - IV therapy

Acyclovir for Adult Chickenpox

- . Effective within 48 hours of rash

	Acyclovir	Placebo
Fever at 72 hrs	16%	45%
Crusting (days)	5	7

- . Return to work ~ 2 days sooner
- . 800 mg QID X 5 days
- . cost: \$62 (12/98)

Wallace MR. *Ann Intern Med* 1992;117:358-363.

VZIG Post-Exposure Prophylaxis

- . Exposure, susceptibility, complications
 - Definite: immunocompromised neonates
- . **Consider: Pregnancy**
 - . Get serology if (-) history
 - Give within 5 days
 - . 30-40% effective
 - . cost \$400

MMWR 1995 (RR-11) 45:1-36.

Post-Exposure Acyclovir for Varicella

- Acyclovir given 7-9 days post-exposure
- 64% of acyclovir patients seroconverted

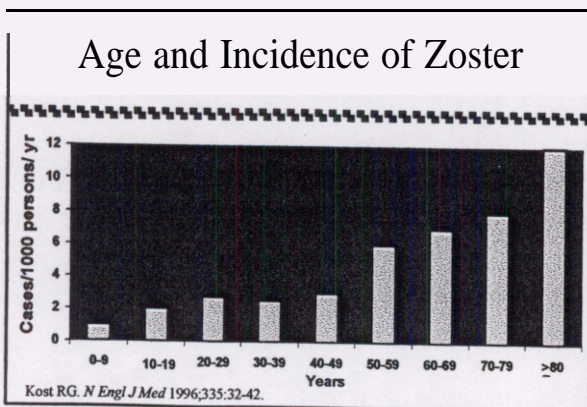
	Acyclovir (n=25)	Placebo (n=25)
Clinical varicella	16%*	84% p<0.01

*Mild disease

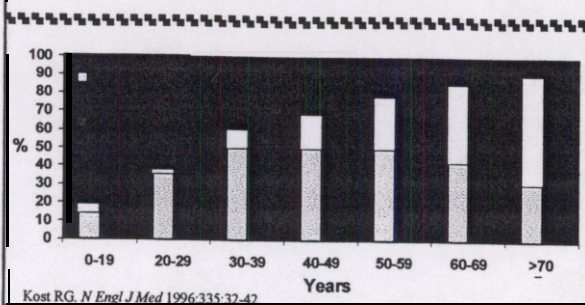
Asano Y. *Pediatrics* 1993;92:219.

Varicella Vaccine 1995

- Live attenuated vaccine
- Children 12-15 months or older
- Adults: (-) history/serology. 2 shots
- Zoster may develop ? frequent
- Cost: \$35, saves 5 X more



Age and Post-Herpetic Neuralgia



Steroids and Post-Herpetic Neuralgia

- . Studies < 100 patients
- . All - reduction in "early" pain
- . Less analgesic use and interrupted sleep
- . Unclear benefit > 1 month

Kest RG. *NEJM* 1996;335:32.

Anti-Virals and Zoster Associated Pain (ZAP)

		Ave. Days ZAP	
		Drug	Placebo
N	Age (y)		
Acyclovir (167)	>50	20	62
Famciclovir (185)	>18	49	66
" (119)	>50	63	119
Valacyclovir (1141)	>50	63	163
(vs. acyclovir)		28-44	51'

Anti-Virals and Zoster Associated Pain (ZAP)

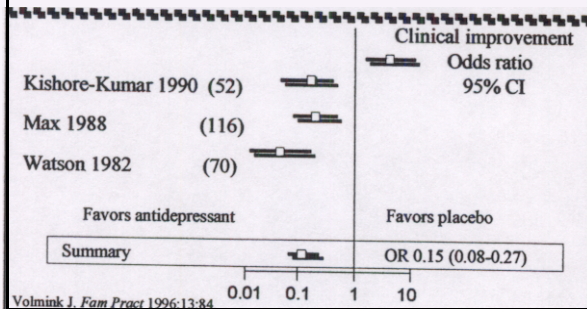
- ✓ Huff JC. J Med Virology 1993;1(suppl):93
N=186; 20 days acyclovir vs 62 days placebo
- ✓ McKendrick MW. BMJ 1986;293:1529.
N=205; decreased acute pain with acyclovir
- ✓ McKendrick MW. BMJ 1986;298:431.
N=364 (continued from above study); no effect of acyclovir on prolonged pain
- ✓ Wood MJ. 2nd Int. Conf. on the VZV, Paris, 1994.
N=187; 49 days acyclovir vs. 86 days (3 placebo-controlled studies)
- ✓ Tyring S. Ann Intern Med 1995;123:89.
N=407; 61-63 days famciclovir vs. 119 days placebo
- ✓ Beutner KR. Antimicrob Agents Chemother 1995;39:1546.
N=1,141; 28-44 days valaciclovir vs 51 days acyclovir

Steroids and Acyclovir for Post-Herpetic Neuralgia

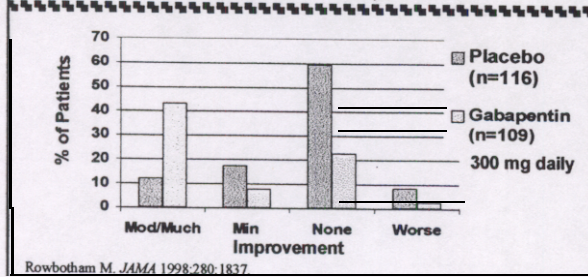
- Less early pain associated with rash (< 1 month)
- 2 X improvement in sleep, analgesic use, and activities
- No studies with other drugs

Wood MJ. *NEJM* 1994;330:896.
Whitley RJ. *Ann Intern Med* 1996;125:375

Antidepressants for PNH > 3 Months



Gabapentin and PHN (> 3 months)



Herpes Zoster Ophthalmicus

- 10-20% of zoster cases
- . 30% develop chronic eye disease
- . Nose tip rash: 2X risk
- . Acyclovir up to 7 days of rash onset

Bell's Palsy: Role of HSV-1

HSV-1 PCR of nerve/muscle

Bell's (n=14)	79%
Ramsey-Hunt (n=9)	0%
Controls (n=12)	0%

Murakami S. *Ann Intern Med* 1996;124:27.

Bell's Palsy: Acyclovir

- Acyclovir 400 mg 5X/d, prednisone 1 mg/kg taper X 10 d
- Within 72 hours of onset

	Acy./Pred. (n=53)	Plac./Pred. (n=46)
75-100% Recovery	92%	76%
Nerve activity	86%	70%
Contracture	13%	28%

Adour KK. *Ann Otol Rhinol Laryngol* 1996;105:371.

Prednisone vs. Acyclovir for Idiopathic Facial Paralysis

- Within 96 hours of onset
- Pred. 1mg/kg or acyclovir 800mg TID X 10 days

	Prednisone (n=47)	Acyclovir* (n=54)
Recovery	94%	78-83%

*More patients with complete paralysis in acyclovir group

De Diego JJ. *Laryngoscope* 1998;108:573.

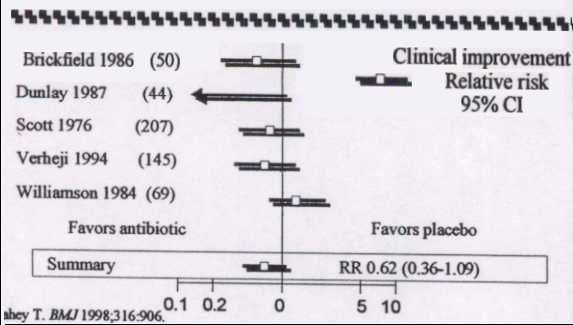
Treatment of Common Viral Illness: Summary

	Time	Drug	Dose
Influenza A	< 48 hrs	Ranitidine	200mg BID x 5d
Varicella	< 24 hrs	Acyclovir	800mg QID x 5d
Zoster	< 72 hrs	Acyclovir	800mg 5X/d x 7d
		Valacyclovir	1000mg TID x 7d
		Famciclovir	500mg TID x 7d
		Prednisone	60mg/d taper -3w
Bell's palsy	< 72 hrs	Acyclovir	400mg 5X/d x 10d
		Prednisone	1mg/kg/d taper-10d

The Common Cold

- . Rhinovirus, adenovirus, RSV, influenza parainfluenza
- . Children: 6-8/year - 23 million work days
- . Adults: 2-4/year - 26 million work days
- . Average duration 1 week
- . 1000 OTC remedies available

Antibiotics for Acute Cough and Bronchitis



Vitamin C and Acute Illness in Children

- Navaho children during Jan-May
- 1 gram daily

Days ill	Vitamin C (n=133)	Placebo (n=129)
0	20	26
1-5	63	58
6-10	52	53
>11	22	24
Total episodes	166	159

Coulehan JL. *N Engl J Med* 1976;295:973.

Echinacea to Prevent URIs

	E. purpurea	E. angustifolia	Placebo
Time to URI (days)	66	69	65
% URI	32.0	29.3	36.7

Melchart D. *Arch Fam Med* 1998;7:541

Zinc Lozenges for Common Cold in Adults

One 13 mg zinc gluconate lozenge q 2 ^o until resolution		
	Zinc (n = 50)	Placebo (n = 50)
Sx resolution (d)	4.4	7.6
Cough(d)	2.0	4.5
Nasal sx (d)	4.0	6.5
Bitter taste (%)	41	12

Mossad SB. *Ann Intern Med* 1996;125:81.

Zinc Lozenges for Common Cold in Children 6-16 Years

Zinc gluconate lozenges mg 5-6 times/day until resolution		
	Zinc (n = 124)	Placebo (n = 125)
Sx resolution (d)	9	9
Cough (d)	6	6
Nasal sx (d)	8	8
Bitter taste (%)	60	40

Mackinn ML. *JAMA* 1998;279:1962.

Things to Suggest Other Than Antibiotics

- . **Fluids**
- . Saline drops and bulb syringe
- . Humidifier
- . Acetaminophen -avoid **asa**
- . Vitamin C
- Zinc lozenges

Late Breaker - Pleconaril for Enteroviral Meningitis

	Pleconaril	Placebo
Symptom duration (d)	4.0	9.5 (p=0.008)
No headache (d)	6.5	18.0 (p=0.008)
Duration analgesics (d)	5.3	11.5 (p=0.03)
Return to work (d)	8.0	14.2
Return to leisure (d)	11.0	18.0

Weiner LB 37th ICAAC, Toronto 1997

Airplane Exposure and Influenza Attack Rate

Time (hours)	No. (ill/at risk)	Attack rate (%)
< 1	8/15	53
1 - 3	5/9	56
> 3	25/29	86
