Infectious Diseases PEDIATRIC NEWS . February 2005

Metronidazole Treats Non-GABHS Tonsillitis

BY MIRIAM E. TUCKER Senior Writer

WASHINGTON — Metronidazole is effective in the treatment of non-β-hemolytic streptococcal tonsillitis, Itzhak Brook, M.D., reported in a poster presentation at the annual Interscience Conference on Antimicrobial Agents and Chemotherapy.

Although group A \beta-hemolytic streptococcus (GABHS) is one of the major caus-

es of tonsillitis, other aerobic as well as anaerobic organisms have been isolated from both normal and inflamed tonsils. The exact role of these organisms is uncertain, and some are believed to be part of the normal oropharyngeal flora, said Dr. Brook, professor of pediatrics at Georgetown University, Washington.

The option of using metronidazole (250 mg every 12 hours for 10 days) was offered to 40 children (mean age 9 years) who presented with sore throat and mas-

R only

sive tonsillar enlargement plus at least one of the following: anterior cervical adenitis, temperature higher than 38.3° C, and pharyngeal or tonsillar exudates or pharyngeal injection.

Rapid streptococcal antigen tests were negative in all the patients, and cultures of the tonsils showed no growth of β -hemolytic streptococci, including group A. None of the children had Epstein-Barr antibodies on immunofluorescence.

The 20 who chose metronidazole were

similar to the 20 who did not with respect to age, race, sex, family size, current clinical findings, and previous antibiotics.

Compared with the children who remained untreated, those given metronidazole had significantly lower rates of fevers over 38° C after 1 day (11 vs. 17 children) and after 2 days (3 vs. 9 children), fewer sore throats after 1 day (12 vs. 19) and 2 days (9 vs. 16), and lower rates of tonsillar enlargement after 3 days (11 vs. 16) and 5 days (8 vs. 14). Pharyngeal injection at 2 days also was reduced with metronidazole, Dr. Brook reported at the conference, sponsored by the American Society for Microbiology.

Metronidazole was chosen for this study because it is effective against anaerobic bacteria but has virtually no activity against facultative and aerobic bacteria. These findings add to previous data suggesting a pathogenic role of anaerobes in the acute inflammatory process in the tonsils.

Oseltamivir **Reduces Rates** Of Pneumonia

WASHINGTON — Oseltamivir's benefits aren't limited to treating and preventing influenza, Beth L. Nordstrom, Ph.D., reported in a poster presentation at the annual Interscience Conference on Antimicrobial Agents and Chemotherapy.

Oseltamivir (Tamiflu) is indicated for the treatment of influenza in patients aged 1 year and older who have been symptomatic for no more than 2 days, and for prophylaxis of influenza in persons aged 13 years and older.

Now, new data suggest that oseltamivir also significantly reduces the risk of pneumonia in all age groups, and the rates of antibiotic use and hospitalization in the oldest and youngest patients, said Dr. Nordstrom, of Ingenix Epidemiology, Auburndale, Mass.

In a retrospective cohort study sponsored by Hoffman-La Roche, claims data from a large U.S. insurer containing a diagnosis of influenza were analyzed.

Among children aged 1-12 years, the proportion with a diagnosis of pneumonia was 0.7% among the 586 for whom oseltamivir was dispensed on the day of influenza diagnosis, compared with 2.5% of the 17,886 who did not receive oseltamivir, a 66% risk reduction.

In patients aged 13-59, pneumonia was diagnosed in 1.3% of the 10,649 who received the drug, compared with 2.1% of the 41,007 who did not-a reduction of 19%. In adults aged 60 and above, the difference was 1.7% of 463 with oseltamivir versus 8.8% of 3,298 without, a 59% drop.

Antibiotic use dropped with oseltamivir by 30% in the 1- to 12-year-olds, by 9% in the 13- to 59-year-olds, and by 14% in the 60-plus group. Hospitalizations were reduced by 71% with oseltamivir in the 1- to 12-year-olds, by 25% in 13- to 59-year-olds, and by 45% in the 60-plus patients.

-Miriam E. Tucker

Diphtheria and Tetanus Toxoids and Acellular Pertussis Vaccine Adsorbed DAPTACEL®

BRIEF SIMMARY. Presea consult package insert for full prescribing information.

MIDICATIONS AND USBACE - DAYFACE* is indicated for archive immunization against diphtheria, tetanus and perbussis in inflants and children is weeks through 6 years of age (prior to sevent birthday).

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suggest that, when gives whole-cell portunsis DTP vaccine, infants and children with a listory of convolution in first-degree numbers have a 2-4-feel increased risk for neurologic events. However, ACP has concluded that a history of convolution in first-degree numbers have a 2-4-feel increased risk for neurologic events. However, ACP has concluded that a history of convolution or that children with may histories should receive DTPP vaccines according to the recommended schedule. 13-4

recommended in the prescribing information is the power of positionist, an appropriate anticypretic may be administered (in the recommended in list prescribing information) at the time of vaccination with a vaccine containing an acultural prefusals and first following 24 hours, to recover the possibility of positions from the 24-feet positions of the 15-feet positions from the 25-feet positions from 24-feet positions from 24-

component (including DAFFACEL*) and for the following 24 hours, to reduce the possibility of post-vaccination fever.²³ Whether to administed part/DECE* to include with previour or supported underlying neuropic disorders must be decided on an individual basis. An important consideration includes the current local incidence of pertuses. The ACP has issued guidelines for such children.¹⁰ PRECEUTIONS. General Cars is to be taken by the health-care provider for the safe and effective use of this scuale incidence. Epinephrine hydrochloride Soldisoft (11.000), other appropriate agents and equipment must be available for immediate use in case an anaphylactic or acute hypersensitivity readnon cours. Health-care providers must be lamilate with current recommendations for the initial immangement of anaphylacis in non-hospital settings, including proper airway management. ¹¹¹ Before an injection of any vaccine, all known precurations should be taken to prevent advanter nections. The expected immune results of the province of the latent prevent advanter nections. The expected immune reports of the province and the province are not containdicated in persons with HVI infection.¹

to DAFFACEL* may not be obtained in immunosuppressed persons. *Perturses containing vaccines are not contraindicated in persons
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ES CONTRAINDATIONS and ADMERSE REFORMS SIGNS OF AN ADMERSE REACTION AFTER THE PREPORTS GOLD REPORTS (SEE CONTRAINDATIONS and ADMERSE REACTIONS).
Drois Interactions: As with other inframmocular (I.M.) injections, use with caudion in patients on anticoagulant therapy.

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for use in a pregnant woman.

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Pediatric User: Singuod ts NOT ACCOMMENDED FOR PERSONS OF DATTACEL ® N INFANTS BELOW 6 WEEKS OF AGE HAVE NOT BEEN ESTABLISHED. (See
DOSAGE AND ADMINISTRATION).

THIS WICKINE SIN OTRECOMMENDED FOR PERSONS 7 YEARS OF AGE OR OLDER. Tetanus and Diphtheria Toxids Adsorbed for Adult

THIS MACRUE E NOT RECOMMENDED FOR PESSORS 7 FASIS OF AREA OF ALEXE, teams and superiors.

WHICH (is is to be used in individual 7 years of age or older.

ADVERSE REACTIONS: Over 11.40 do doses of DAFFACE! I have been administered to infrasts and bodders in 6 clinical studies. In all,

2006 of litterin exceeded and ind 3 doses and 40°F doctation received 4 doses of DAFFACE! As administered to the following the second of the second of

TABLE 112.13
GE OF INFANTS FROM SWEDEN I EFFICACY TRIAL WITH LOCAL OR

	Dose 1 (2 MONTHS)				e 2 (4 MONT	HS)	Dose 3 (6 MONTHS)		
EVENT	DAPTACEL® N = 2,587	DT N = 2,574	DTP N = 2,102	DAPTACEL® N = 2,563	DT N = 2,555	DTP N = 2,040	DAPTACEL® N = 2,549	DT N = 2,538	DTP N = 2,001
Local Tenderness									
(Any) Redness	8.0*	8.4	59.5	10.1*	10.3	60.2	10.8*	10.0	50.0
≥2 cm Swelling	0.3*	0.3	6.0	1.0*	8.0	5.1	3.7*	2.4	6.4
≥2 cm	0.9*	0.7	10.6	1.6*	2.0	10.0	6.3*5	3.9	10.5
Systemic Fever† ≥38°C									
(100.4°F) Fretfulness††	7.8* 32.3	7.6 33.0	72.3 82.1	19.1* 39.6	18.4 39.8	74.3 85.4	23.6* 35.9	22.1 37.7	65.1 73.0
Anorexia Drowsiness	11.2* 32.7*	10.3 32.0	39.2 56.9	9.1° 25.9°	8.1 25.6	25.6 50.6	8.4° 18.9°	7.7	17.5 37.6
Crying ≥1									
hour Vomiting	1.7* 6.9*	1.6 6.3	11.8 9.5	2.5* 5.2**	2.7 5.8	9.3 7.4	1.2* 4.3	1.0 5.2	3.3 5.5

vaccination was 0.39 following does 1 and capes 3 and the incidence of persistent crying 23 hours within 24 hours of vaccination was to find and 26 following does 1 and 2 respectively and persistent crying 25 hours within 24 hours of vaccination was been caused on white limits availing and operational configurations of the configuration of t

TABLE 2 13.16 PERCENTAGE OF CHILDREN FROM PHASE II STUDY IN CANADA WITH LOCAL OR SYSTEMIC REACTIONS WITHIN 72 HOURS OF VACCINATION WITH DAPTAGEL® AND WHOLE-GELL PERTUSSIS DTP VACCINE AT 2, 4, 6 AND 17-18 MONTHS OF AGE													
	Dose 1 (2 MONTHS)		Dose 2 (4 MONTHS)		Dose 3 (6 MONTHS)		Dose 4 (18 MONTHS)						
	DAPTACEL®	DTP#	DAPTACEL®		DAPTACEL®		DAPTACEL®						
EVENT	N = 324	N = 108	N = 321	N = 106	N = 320	N = 104	N = 301	N = 97					
Local													
Redness													
Any	12.7*	44.4	20.6*	57.5	22.2*	51.9	36.5*	55.7					
≥10 mm	1.2*	13.9	7.8*	22.6	10.0*	17.3	27.9	36.1					
≥35 mm	0.3*	3.7	0.3*	5.7	1.6	1.9	21.9	20.6					
Swelling													
Any	4.3*	23.1	4.3*	32.1	4.7*	25.0	18.6*	28.9					
≥10 mm	1.9*	15.7	2.2*	21.7	3.8*	14.4	15.9°	25.8					
≥35 mm	0.3*	6.5	0*	5.7	0.9*	4.8	11.3	15.5					
Tenderness†													
Anv	10.2*	37.0	7.5*	51.9	8.8*	48.1	23.9*	86.6					
Moderate + Severe	0.9*	13.0	1.2*	20.8	1.3*	17.3	3.0*	53.6					
Severe	0*	4.6	0.3*	7.5	0*	4.8	0.3*	12.4					
Systemic													
Fever ^{‡5}													
Any ≥37.5°C (99.5°F)	12.0°	43.7	7.7*	50.0	14.8*	53.2	14.5*	67.9					
≥38°C (100.4°F)	0.7	1.9	0*	7.8	1.2*	11.7	1.9*	17.9					
≥40°C (104°F)	0.3	0	0	1.0	l 0	1.1	0	0					
Irritability													
Any	41.0*	65.7	41.4*	68.9	40.9*	67.3	36.9*	79.4					
Moderate + Severe	9.0*	18.5	6.9*	22.6	5.0°	22.1	5.0*	24.7					
Severe	0	1.9	0.3	0	0	1.0	0	2.1					
Anorexia Q													
Any	16.0	22.2	9.0*	16.0	11.6*	23.1	17.6*	41.2					
Moderate + Severe	1.5	3.7	0.9	2.8	1.3	1.9	2.0*	13.4					
Severe	0	0	0.3	0	0	0	0	2.1					
Drowsiness [©]													
Any	43.2	52.8	21.8*	33.0	14.4*	32.7	13.3*	29.9					
Moderate + Severe	7.7	8.3	2.8*	7.5	1.3	0	1.0*	6.2					
Severe	0.3	0	0	0	0	0	0	0					
Crying ≥3 Hours	0.6	0.9	0.3	0.9	0	1.0	0	1.0					
N = Number of evalual	hle subjects	# DTP: wh	ole-cell pertu	ssis DTP va	ccine (Aventis	Pasteur Lim	ited) * Sign	ficantly les					

N = Number of evaluable subjects. # DTP: whole-call perfusais DTP actions (Aventile Pastant Uminet). "Significantly less reachappine than whole-cell DTP vaccine, Po-coll 5 + Moderate = sustained ory with gorden pressure all nicelosis in Scower - cries when leg is moved. # Temperature measurements were asilary. * Number of evaluable subjects for DAPTACE-NOTP = 3017/03. 2, 69 and 13 mornity, respectively. * Nufcerista = member of evaluable subjects for DAPTACE-NOTP = 3017/03. Severe = persistent cytrigatezamenting and inability to console. * Number of evaluable subjects for DAPTACE-NOTP = 1 missed one or two feels, Severe = little or to riskles for The Note of the severe of the sev

REPERIOLSS.

1. American Academy of Pediatrics. In: Pickering LK, ed. 2000 Red Book: Report on the Committee of Infectious Disa Elk Grove Village. IL: American Academy of Pediatrics 2000:17.31-35.51-53.54.65.68.440-445.759-765. 2. Recomme In American Acquires of Production, and Conference of the Conferen The second of th