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Impact of
Maternal Angroid
Status
on Pregnancy and Fetal
and
Childhood Development
Friday, April 2, 2004
Holiday Inn Old Town Select
Alexandria, Virginia



A symposium of the American Thyroid Association and the American Association of Clinical Endocrinologists



Impact of Maternal Thypoid Status

on Pregnancy and Fetal and Childhood Development



Friday, April 2, 2004

Holiday Inn Old Town Select Alexandria, Virginia

> CME sponsored by the Johns Hopkins University School of Medicine

American Thypoid Association (ATA)

The ATA provides outstanding leadership in thyroidology by promoting excellence and innovation in clinical care, research, education, and public advocacy.

American Association of Clinical Endocrinologists (AACE)

The American Association of Clinical Endocrinologists is a professional medical organization devoted to the enhancement of the practice of clinical endocrinology.

Target Andience

Health care professionals caring for women of reproductive age or during pregnancy, particularly those women with known thyroid disorders; healthcare professionals caring for infants born to women with thyroid disorders. This includes primary care physicians (obstetrician-gynecologists, family medicine, and internists), sub-specialists (pediatric, adult, and reproductive endocrinologists, perinatologists, neonatologists and genetic counselors), specialists in human development (medical psychologists), epidemiologists and public health policy makers, and advocacy groups for maternal and child health.

Course Description

Evidence is accumulating that maternal thyroid dysfunction has an untoward impact on fetal and childhood development. Maternal hypothyroidism is estimated to be 100 times more common than congenital hypothyroidism. There is a need for clinicians caring for women of reproductive age and during pregnancy to know which patients are at risk for thyroid dysfunction, and to know how to diagnose and manage thyroid disorders during pregnancy. This symposium will review normal thyroid function in healthy women and changes during pregnancy, discuss the prevalence and etiology of thyroid dysfunction during pregnancy, and review evidence of its adverse effect on pregnancy outcome and fetal and childhood development. This will include a discussion of the potential role of environmental toxins on thyroid function. The diagnosis and management of thyroid disorders during pregnancy will be reviewed, including a focus on whether at-risk patients can be identified and the potential benefits of population screening.

Course Objectives

Following this program, the participant should be able to:

- Describe the important changes in thyroid function that occur during pregnancy.
- List the most common causes of maternal hypothyroidism.
- Select appropriate thyroid diagnostic tests during pregnancy and interpret their results.
- Know factors to consider in the treatment of hypothyroidism and hyperthyroidism during pregnancy.
- Understand the implications of maternal hypothyroidism and hyperthyroidism on fetal outcome.

Program

This schedule	is subject to change.	10:45 - 11:10	Management of Maternal
MORNING			Hypothyroidism during Pregnancy
7:15 - 8:00	Registration and Continental Breakfast		P. Reed Larsen, MD
8:00 - 8:15	Welcome and Introduction Stephen H. LaFranchi, MD Robert C. Smallridge, MD, FACE	11:10 - 11:35	Management of Maternal Hyperthyroidism during Pregnancy Jorge H. Mestman, MD
	ll Thyroid Physiology ossein Gharib, MD, FACE	11:35 - 12:00	Panel Discussion/Q&A
8:15 - 8:40	Thyroid Function in Healthy Women and Changes during Pregnancy	12:00 - 1:00 AFTERNOON	Luncheon Program Invited Speaker
	Daniel Glinoer, MD, PhD	Impact on Fetus	and Offspring
8:40 - 9:05	The Fetus: Evidence for the Role of	Moderator: Tho	mas P. Foley Jr., MD
	Maternal Thyroid Hormone in the First Half of Pregnancy and Fetal Thyroid Function in the Second Half of Pregnancy Gabriella Morreale de Escobar	1:00 - 1:30	Assessing the Evidence that Maternal Hypothyroidism has an Untoward Impact on Pregnancy Outcome Brian M. Casey, MD
9:05 - 9:30	Selection of Thyroid Diagnostic Tests and their Interpretation during Pregnancy Carole A. Spencer, PhD, FACB	1:30 - 2:10	Investigations of Neurodevelopmental Outcome in Infants and Children Born to
9:30 - 10:00	Panel Discussion / Q&A		Women with Thyroid Dysfunction John H. Lazarus, MA, MD, FRCP, FACE
10:00 - 10:20	Refreshment Break	0.40	
	oid Disorders atherine Y. Spong, MD	2:10 - 2:40	Panel Discussion/Q&A Joanne Rovet, PhD Rosalind S. Brown, MD, CM
10:20 - 10:45	Prevalence and Etiology of Thyroid Dysfunction Kenneth J. Leveno, MD	2:40 - 3:00	Refreshment Break

Environmental Influences Moderator: Michael D. Shelby, PhD

3:00 - 3:25	Environmental Toxins: Evidence from Animal Models that Environmental Agents Influence both Maternal and Fetal Thyroid Function R. Thomas Zoeller, PhD
3:25 - 3:50	Determining the Benefits and Costs of Identifying Reproductive Age Women At-Risk for Thyroid Disorders Paul W. Ladenson, MD

Post-partum

Moderator: Robert C. Smallridge, MD, FACE

3:50 -	4:15	Post-partum Thyroiditis
		Alex S. Stagnaro-Green, MD
4.45	4.05	004

4:15 - 4:25 **Q&A**

Summary

4:25 - 4:45	Summary and Recommendations for Thyroid Screening in Pregnancy: Is There a Consensus Yet? Gregory A. Brent, MD
4:45	Complete and Return the Evaluation

and Credit Report Forms.

The Johns Hopkins University School of Medicine takes responsibility for the content, quality and scientific integrity of this CME activity.

General Information

ACCREDITATION STATEMENT

The Johns Hopkins University School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

CREDIT DESIGNATION STATEMENT

The Johns Hopkins University School of Medicine designates this educational activity for a maximum of 7.5 category 1 credits toward the AMA Physician's Recognition Award. Each physician should claim only those credits that he/she actually spent in the activity.

AMERICAN ACADEMY OF FAMILY PHYSICIANS (AAFP)

This activity has been reviewed and is acceptable for up to 6.5 *prescribed* credits by the American Academy of Family Physicians.

PSYCHOLOGISTS

The Johns Hopkins University School of Medicine is authorized by the State Board of Examiners of Psychologists as a provider of continuing education. Johns Hopkins University School of Medicine maintains responsibility for this program. A certificate for 7.5 CEUs will be awarded upon completion of this activity.

LOCATION

 Holiday Inn Old Town Select
 800-368-5047

 480 King Street
 703-549-6080

 Old Town Alexandria, Virginia 22314
 FAX: 703-684-6508

Hotel Reservation Cut-off Date: March 2, 2004

Check-in time: 3:00 pm; Check-out time: 12:00 Noon

A block of rooms has been reserved for the convenience of our attendees. For reservations, call the hotel directly and be sure to specify that you are attending the American Thyroid Association meeting to receive the special room rate of \$179 per night, single or double, plus tax. The Old Town Holiday Inn Select offers complimentary shuttle service to and from Reagan National Airport between the hours of 7:00 am and 10:00 pm. Courtesy phones are located at each baggage terminal.

TRAVEL INFORMATION

Call United Airlines at (800) 521-4041 for discounted rates and refer to Meeting ID Number 549TJ. The closest airport is Reagan National Airport (DCA).

Additional information on travel arrangements will be forwarded with your course confirmation notice. To receive this information more quickly, you may call (410) 955-2959 to have this information faxed to you. Please specify that you are interested in information pertaining to the Maternal/Fetal Thyroid Health course.

FEES

REGISTRATION CUT-OFF DATE: March 30, 2004

Please note: Payment must accompany your registration. Registrations received after 5 p.m. EST on March 30th will be subject to a \$50 late fee. Only on-site registrations will be accepted after this date.

Physicians	\$225
Residents*/Fellows*/Allied Health Professionals	\$75

*with verification of status

The registration fee includes instructional materials and refreshment breaks. Foreign payments must be made by credit card or with a U.S. Dollar World Money Order.

An enrollment confirmation will be sent to each registrant. If you do not receive a confirmation by March 26, 2004, please call (410) 955-3169 to confirm that you are registered. A certificate of attendance will be mailed by May 14th.

Please visit our website for on-line registration, CME credit updates and driving/parking directions, as well as for information on other Johns Hookins CME offerings:

www.hopkinscme.org/cme

Cancellation Policy: If you must cancel, notify the Office of Continuing Medical Education by phone, (410) 955-2959, or fax, (410) 955-0807. An administrative fee of \$50 will be retained on all refunds, which will be processed only after written notice is received. Cancellations received after March 26th are non-refundable. The Johns Hopkins University reserves the right to cancel or postpone any course due to unforeseen circumstances. In the event of cancellation or postponement, the Johns Hopkins University will refund only the registration fee and is not responsible for other related travel expenses.

EMERGENCY CALLS

During the day of this meeting only, April 2nd, direct emergency calls to the hotel operator at 703-549-6080.

AMERICANS WITH DISABILITIES ACT

The Johns Hopkins University School of Medicine fully complies with the legal requirements of the ADA and the rules and regulations thereof. Please notify us if you have any special needs.

POLICY ON FACULTY AND PROVIDER DISCLOSURE

It is the policy of the Johns Hopkins University School of Medicine that the faculty and provider disclose real or apparent conflicts of interest relating to the topics of this educational activity, and also disclose discussions of unlabeled/unapproved uses of drugs or devices during their presentation(s). Detailed disclosure will be made in the course handout materials.

FOR FURTHER INFORMATION

Registration/Confirmation/

Certificates (410) 955-3169 / (410) 955-2959
Fax Registration (410) 955-0807
Other Course Information cmenet@jhmi.edu

The American Thyroid Association national headquarters is at

6066 Leesburg Pike, Suite 650

Falls Church, VA 22041

Phone (703) 998-8890 / Fax (703) 998-8893

E-mail: admin@thyroid.org Website: www.thyroid.org

The American Association of Clinical Endocrinologists national headquarters is at

1000 Riverside Avenue, Suite 205 Jacksonville. FL 32204

Phone (904) 353-7878 / Fax (904) 353-8185

E-mail: info@aace.com Website: www.aace.com

ACKNOWLEDGEMENT

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Abbott Laboratories; National Institute of Environmental Health Sciences (NIEHS); Monarch Pharmaceuticals and Jones Pharma, wholly owned subsidiaries of King Pharmaceuticals, Inc.

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GUEST SPEAKERS

Brian M. Casey, MD

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P. Reed Larsen, MD

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R. Thomas Zoeller, PhD

Professor of Biology University of Massachusetts Amherst, Massachusetts

Registration Form

last name

04-511262

middle initial

Please complete and mail to the Johns Hopkins University, Continuing Medical Education, P.O. Box 64128, Baltimore, Maryland 21264-4128. Include check payable to **HOPKINS/ MATERNAL/FETAL THYROID HEALTH**, or fax your credit card registration to (410) 955-0807. Please include both front and back of registration form, including mailing label.

PAYMENT MUST ACCOMPANY FORM TO CONFIRM YOUR REGISTRATION.

Please type or print clearly:

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