

性差の視点で医療を考える

天野 恵子

千葉県衛生研究所 所長
千葉県立東金病院 副院長

平成17年5月31日

帝国ホテル

性差を考慮した医療(Gender-specific Medicine) とは

男女比が圧倒的に一方の性に傾いている病態、発症率はほぼ同じでも、男女間で臨床的に差を見るもの、いまだ生理的、生物学的説明が男性または女性で遅れている病態、社会的な男女の地位と健康の関連などに関する研究を進め、その結果を疾病の診断、治療法、予防措置へ反映することを目的とした医療改革
— Gender-specific Medicine (GSM) — である。

性差医学入門

女と男のよりよい健康と医療のために

監 修 貴邑富久子
翻訳編集代表 荒木葉子



Exploring the Biological Contributions to Human Health
Does Sex Matter?

JiO じほう

定義

性(セックス) : 生物学的分類で、染色体により決定付けられた生殖器およびその機能により男性と女性に分けられる。

ジェンダー : 男性あるいは女性としての個人の自己表現。または、その人の表現に基づいた性が社会的な慣例によってどのように受け止められているかということ。
ジェンダーは生物学的要素に根差し、環境と経験により形づくられる。

生物学 : 生命と生命体の学問

(Dorland's Illustrated Medical Dictionary, 1994 ;
Stedman's Medical Dictionary, 1995)。

生命の遺伝学的、分子的、生物学的、ホルモンの、
細胞学的、生理学的、行動学的、そして心理社会的な
視点を含む。

ここ数年、男女間の差異と類似への注目度はとても高い。
そして、そこには2つのレベルが存在する。

社会のレベルでは研究者たちが行動、ライフスタイル、環境がどのように人間の発達と健康に影響を与えているかについて調べている。

生物個体のレベルでは、臨床家や研究者がヒトの臓器成分や生体システムについて調査している。

しかしながら、科学者はより基礎的な細胞や分子レベルにおける男女差を直接に、また意図的に研究することにはあまり注意を払ってこなかった。データがあるにしてもほかの研究の副産物であることが多かった。歴史的に見てみると、研究者たちは、性差が生殖器系以外には存在しないか、あるいは、あっても関係がないと考えていたのである(研究で使われる細胞や組織が、どちらの性によるものか一顧だにされなかったことがその一例である)。

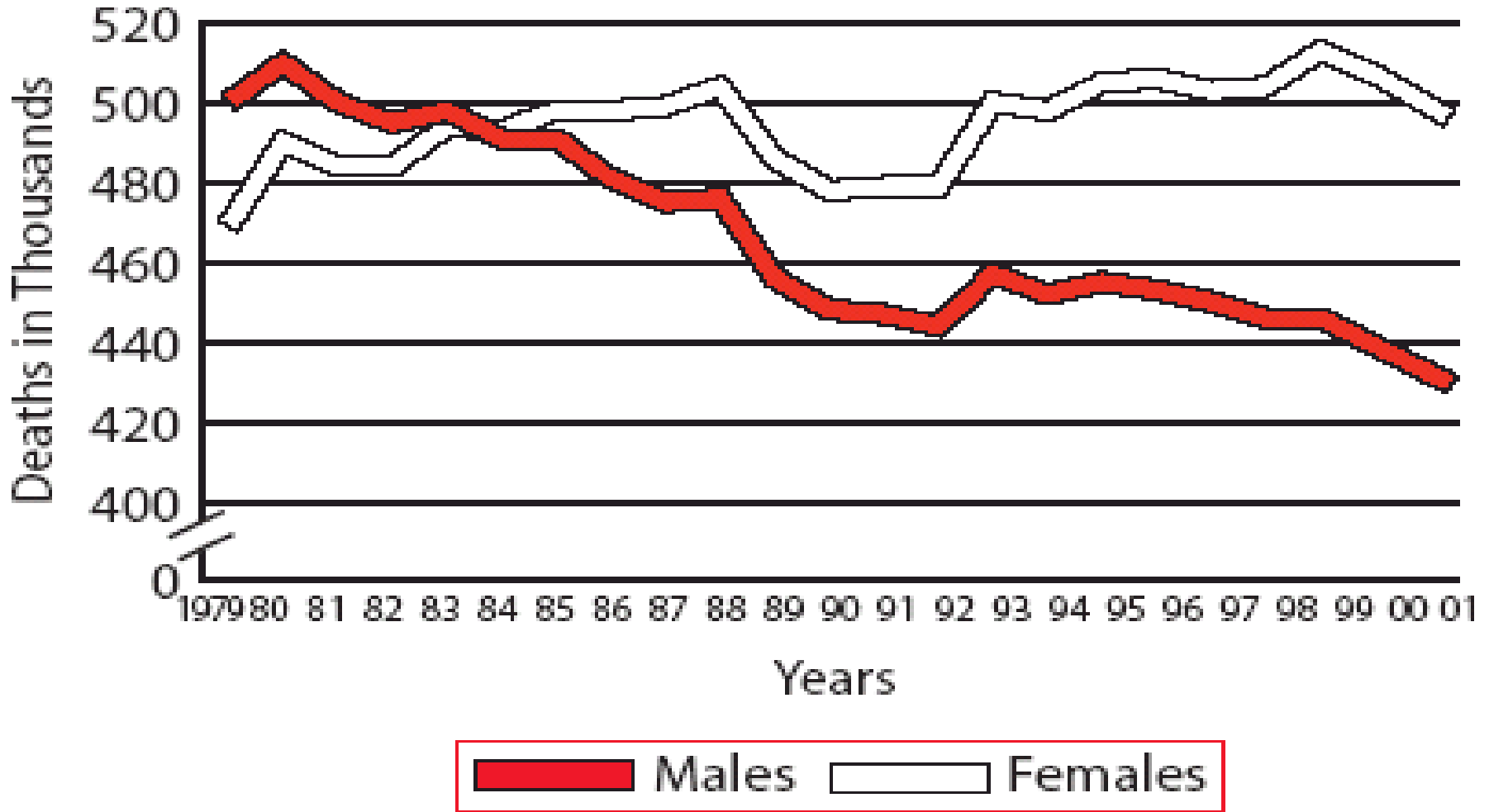
科学的には、女性が臨床研究から除外される理由として、ほとんどの条件で、男性と女性との間で治療に対する反応に大きな差異はないと臨床研究者の間で広く信じられていた、

女性を含めることによりホルモンの周期という余計な変数が加わり、研究対象の均一性が低下する (Institute of Medicine, 1994) ということがあげられる。

皮肉なことに女性のホルモン周期は治験の重大な干渉因子であり、ホルモンの変動に試験物質がどのように反応するか予測できないことはよく認識されていたにもかかわらず、男性のみを被験者として開発された治療をそのまま女性にあてはめてみてもよいとするほど男女は近似しているものと、広く信じられていた (Haseltine and Jacobson, 1997)。

1 Cardiovascular Disease Mortality Trends for Males and Females

United States: 1979-2001



Source: CDC/NCHS.

Women's Health Research Blossoms

Sparked by activism, an explosion of new research is focusing on gender differences in disease and treatment—while women in developing countries struggle with much more pressing needs

In 1957, journalist Barbara Seaman, in the hospital after the birth of her first child, asked her doctors and nurses what was in the pills they were feeding her. Medical personnel dismissed her questions. Only after her baby became very sick did she discover that the pills were laxatives, which she was inadvertently passing on to the child through her breast milk. The laxatives, she says, had been administered in the blithe assumption that no modern mother would choose breast feeding over formula.

Seaman's outrage over the laxatives led her to a crusade as medical muckraker that would eventually put her in the forefront of the women's health movement. By the early 1960s—soon after the drug company G. D. Searle began marketing Enovid, the first oral contraceptive—she was a health columnist for magazines such as *Brides* and *Ladies' Home Journal*. When readers deluged Seaman with questions about birth-control pills, she began an investigation that culminated in *The Doctors' Case Against the Pill*, a 1969 expose claiming that the pill caused fatal strokes, heart disease, diabetes, depression, and a host of other ailments. As the book's cover put it: "Love with the pill can cripple and kill."

The ensuing controversy cost Seaman her magazine jobs. But it also led then-Senator Gaylord Nelson (D-WI) to hold hearings on pill safety in 1970. Interrupting the hearings from the audience, Alice Wolfson, a civil-rights activist and member of the first "women's group" in New York City, demanded to know why no women—even Seaman—were being allowed to testify. TV cameras recorded the disruption as Seaman and other women joined the protest.

Even as the hearings bared the pill's safety defects, the dissent helped to launch a political movement focusing on women's health. "By 1975, nearly 2000 [women's self-help medical] projects were scattered across the United States, many of them groups of volunteers without an institution," says Cynthia Pearson, program direc-

tor of the National Women's Health Network, an advocacy clearing-house founded by Seaman, Wolfson, and three other women activists that year. The projects harried women with health information, showing them how to examine their own breasts, cervixes, and vaginas for problems. Controversially, some promoted the Del-Eu, a homemade device that let women perform abortions on themselves.

Although the movement centered on women, Pearson says, its targets—overuse of medical technology, insufficiently rigorous drug testing, and the refusal to listen to patients—affected both sexes. "Because women went to doctors for prenatal care, childbirth, birth control, and menopause, all of which are not disease states, young and middle-aged healthy women interacted far more with doctors than men, who only saw them when they were sick. So women were exposed to a disproportionate share of what was wrong with the medical establishment as a whole." Still, she says, "the medical profession was 95% male," which meant there was "a little extra paternalistic treatment that doctors inflicted on women in those days."

As today's clinicians and researchers readily concede, this nascent movement helped change medicine and medical research profoundly. A quarter-century after *The Doctors' Case*, almost half of all U.S. medical

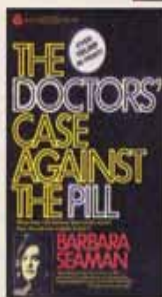
students are female, universities have established programs in women's diseases, and governments across the world have created offices of women's health. In 1994 and 1995 alone, women's health issues have been or will be a focus of the International Year of the Family; the International Conference on Population and Development in Cairo, Egypt; the World Summit on Social Development in Copenhagen, Denmark; and, most important, the United Nations Fourth World Conference on Women, to be held in Beijing next month.

But as the women's health movement has expanded, it has divided into two diverse strains. In the industrialized world, women have changed their focus; they are less likely to criticize the attitudes of clinicians and more likely to argue that the male medical-research hierarchy has historically mistreated them. Activists charge that scientists have neglected to include women in epidemiological studies and clinical trials, arguing that researchers mistakenly assumed that data from middle-aged white males apply equally well to women, minorities, and the elderly. And, feminists complain, while researchers have failed to fund research on women's diseases—breast cancer being the most notorious example—they have worked overtime on female contraception, neglecting comparable research on men. Partly because of these accusations, the new field of gender-based medicine has come into existence, concentrating on the fundamental differences in male and female responses to disease and treatment. (See stories on pp. 771, 773, and 777.)

In the developing world, though, the concerns are different. Women in poor nations die at high rates from reproductive problems and diseases that can easily be cured or prevented, often at little additional cost. In some areas, rates of maternal mortality and morbidity are increased by cultural attitudes that block women's access to health services, especially if those services include abortion; in others, the problem has been exacerbated by the organizational failures of centralized economies. And, in the view of health professionals, some health-care promotion programs by industrialized nations have focused so intently on Third World children that they have ignored—or even added to—the problems of their mothers. (See story on p. 780.)



Bitter pill. Barbara Seaman's 1969 expose of the dangers of oral contraceptive use helped to trigger the women's health movement.

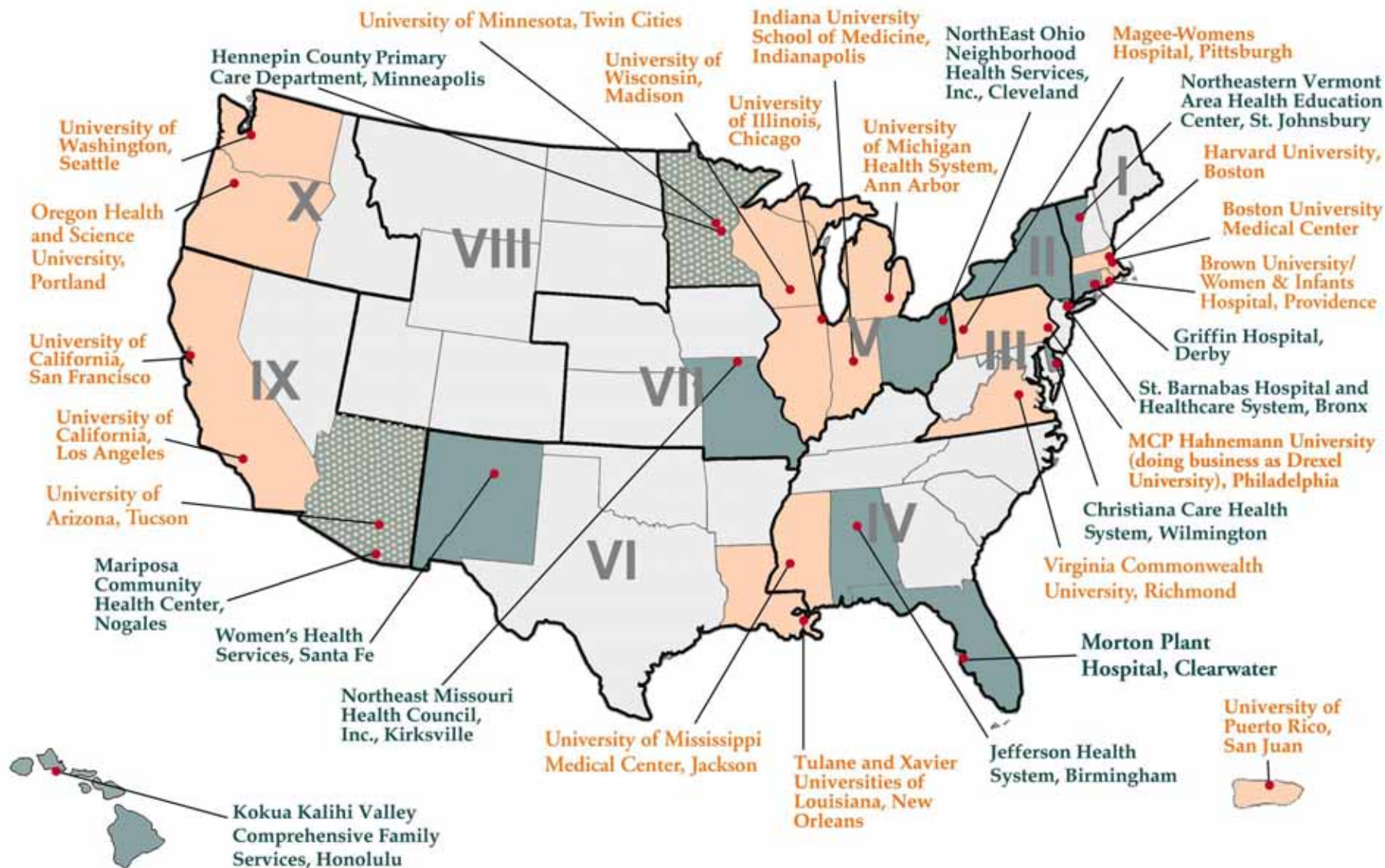



National Centers of Excellence in Women's Health

National Community Centers of Excellence in Women's Health



KEY States with a CoE States with a CCOE States with both a CoE and CCOE





**WOMEN'S HEALTH CARE
COMPETENCIES**
Sample Learning Objectives
**for UNDERGRADUATE
MEDICAL EDUCATION**

SECTION ONE: Introduction

Sex and gender differences in health and disease have been recognized in many fields over the past two decades, creating a significant new body of knowledge that warrants inclusion in the medical curriculum. With this in mind, the Association of Professors of Gynecology and Obstetrics (APGO) convened an interdisciplinary retreat devoted to women's health care education in November 2000. Eighty-eight participants, representing various academic, administrative and governmental institutions, were invited to attend. Together, they identified a body of factual information, behaviors and skills they believed all students should possess prior to graduation from medical school. The resulting pamphlet, *Women's Health Care Competencies for Medical Students*, was distributed to U.S. and Canadian medical schools in June 2001 and is available on-line at www.apgo.org. That publication was intended to help medical schools produce graduates with the desire, skill and confidence to provide care for their female patients. *Women's Health Care Competencies: Sample Learning Objectives for Undergraduate Medical Education* is simply the next step in this process.

The first section of this document replicates the list of competencies already in circulation. Following some background information there are two sets of learning objectives, presented in table format. These spreadsheets were developed by two distinct groups of medical educators, namely, the National Centers of Excellence in Women's Health Professional Education Working Group (NCoE PEWG) and the APGO Undergraduate Medical Education Committee (UMEC). Each group was charged with developing a set of learning objectives for an assigned competency. The resultant grids are intended to serve as a model to guide medical schools and teaching institutions as they adapt the competencies to suit their unique programs.

The spreadsheets contain five columns, with the learning objectives stated in the first column. The abbreviations used in the second column were derived from the work of George E. Miller,¹ and represent the desired level of competence an undifferentiated student should achieve for each stated objective. The first level, *knows (K)*, is achieved when the learner gathers facts. At the level of *knows how (KH)*, facts are interpreted and applied to given situations. Demonstrating that this is accomplished occurs at the competency level of *shows how (SH)*. At the highest tier, *does (D)*, the student integrates his or her knowledge and skills into actual professional practice.

The third column lists the assessment tools appropriate for evaluating a student's mastery of each objective (i.e. multiple choice questions (MCQs), essays or objective structured clinical examinations). Most of these tools have been formally described as a part of the Accreditation Council for Graduate Medical Education (ACGME) Outcome Project and are accessible on-line at www.acgme.org. They are more fully described in the table "ACGME Outcome Project Suggested Best Methods of Evaluation," reprinted with permission by the ACGME on page 7 of this booklet.

The fourth column is similarly linked to the ACGME Outcome Project General Competencies. As part of this effort, the ACGME has defined the skills and behaviors to be expected from all graduating residents. Examples include interviewing, working with a team, and creating therapeutic relationships with patients. As many of these skills are initially taught in and can be evaluated in medical school, we were inspired to consider medical students as lifelong learners. The ACGME General Competencies list appears in outline form on page 6 of this document and in table form on page 7. In the

interest of keeping the NCoE and UMEC tables short, the ACGME competencies were keyed as follows: 1.a. Patient Care – Caring and respectful behaviors; 1.b. Patient Care – Interviewing; 1.c. Patient Care – Informed decision-making, etc.

The final column, essentially a reference list, is included to facilitate the acquisition and dissemination of evidence-based knowledge on each topic. Whenever possible, we suggest sources that are continuously updated, and provide the most current information.

With learning objectives written for two sections of the original pamphlet, much work remains. Plans are underway to develop the remaining competencies in a similar fashion at an interdisciplinary invitational retreat to be held in June 2003. Individual medical educators, curriculum committees and deans are also encouraged to consider women's health care education within their own institutions. To facilitate this exercise, a blank grid is included. We hope it inspires you and your colleagues to develop a comprehensive set of learning objectives in women's health appropriate to your specific learning environment.

¹ Miller, GE. The assessment of clinical skills / competence / performance. *Acad Med* 1990;65:563-7.

1999年の第45回日本心臓病学会で日本女性における虚血性心疾患というシンポジウムが行なわれました。私はそこでGender-Specific Medicineについてお話しし、参加した研究者たちに生涯を通じたsexとgenderのもたらず差についての検証を行なうようお願いした。





その頃、Evidence based Medicineの概念が広まりつつある頃でしたので反応は大きなものがありました。私は、鹿児島大学の鄭教授の依頼を受けて性差の医療について講演をしにまいりました。その後、2001年に生涯にわたる性差を考慮した医療を掲げる女性外来が鹿児島大学に開設されました。これは、国立大学で初めての試みでした。

その外来の理念は

1. 初診は30分間
2. 症状、主訴を問わない
3. 紹介状は不要
4. 女性医師が診療を担当する

Evidence-based Medicine

Narrative-based Medicine

個の医療

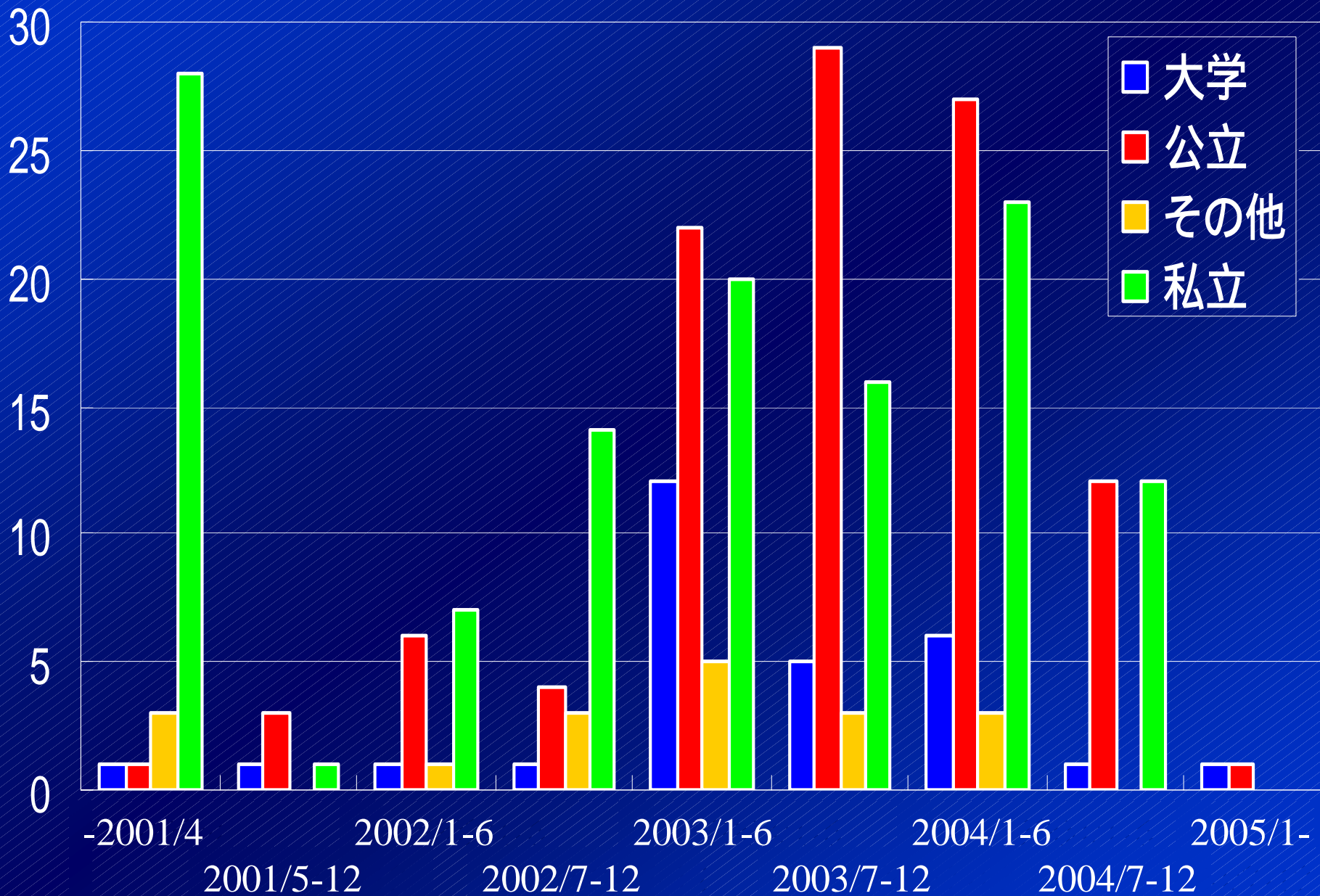
統合医療

日本における女性専用外来の展開

(2004年9月)



	大学	公立	その他	私立	計
～ 2001/4	1	1	3	28	33
2001/5 ～ 12	1	3	0	1	5
2002/1 ～ 6	1	6	1	7	15
2002/7 ～ 12	1	4	3	14	22
2003/1 ～ 6	12	22	5	20	59
2003/7 ～ 12	5	29	3	16	53
2004/1 ～ 6	6	27	3	23	59
2004/7 ～ 12	1	12	0	12	25
2005/1 ～	1	1	0	0	2
不明					55
	29	105	18	121	328



先端医療

と

性差医療

微小血管狭心症

いわゆる正常冠動脈造影
女性症例における

Syndrome X microvascular angina,
CFR低下、Ach 血管拡張反応低下、
latent multiple plaque に関する検討報告(WISE)
が注目される。

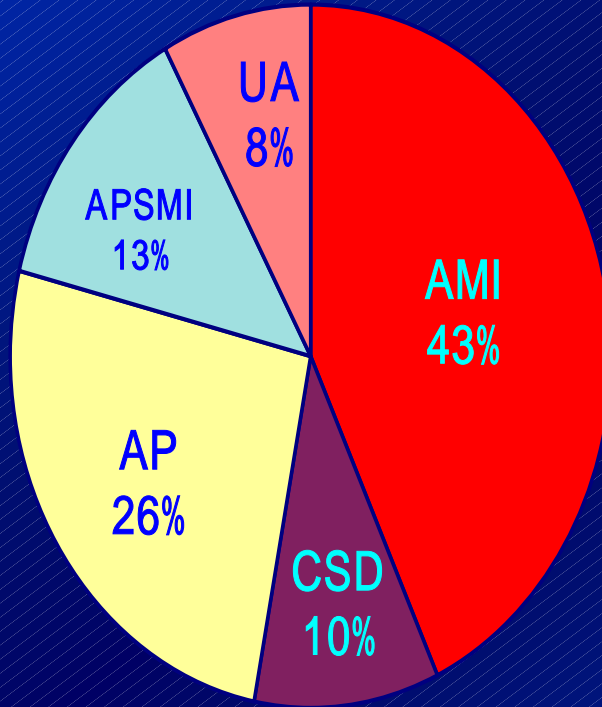
WISE: NHLBI sponsored Women's Ischemia Syndrome Evaluation Study

Framingham Study における虚血性心疾患の性差

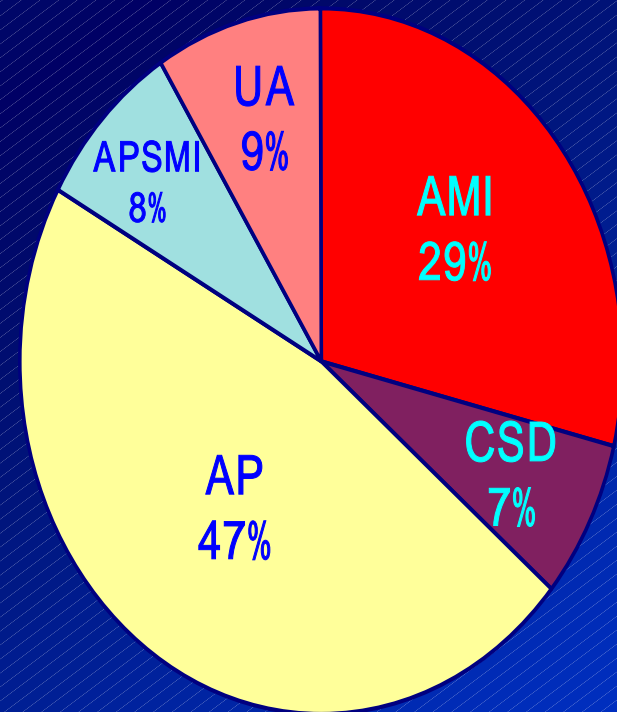
(35 ~ 84歳, 26年 follow-up)



- 男性 -



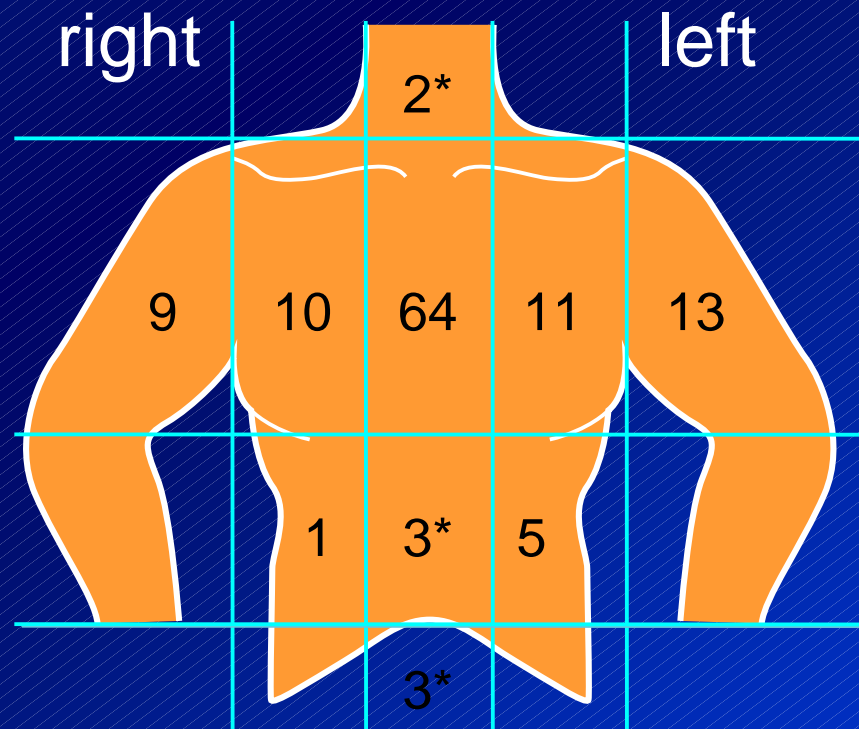
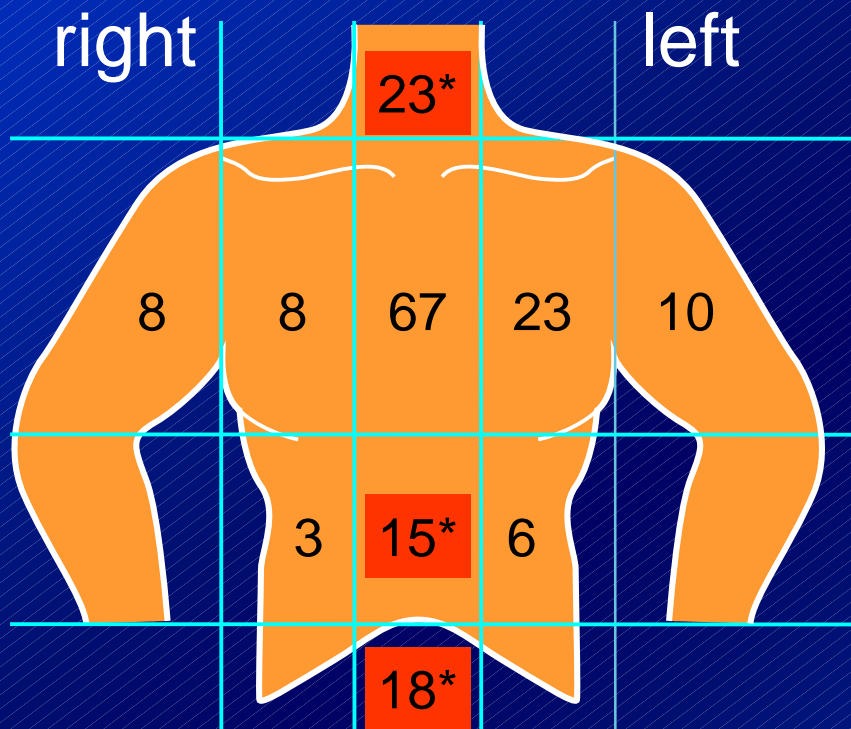
- 女性 -



狭心症症例における症状の局在の性差 (ACRE Study)

Women

Men



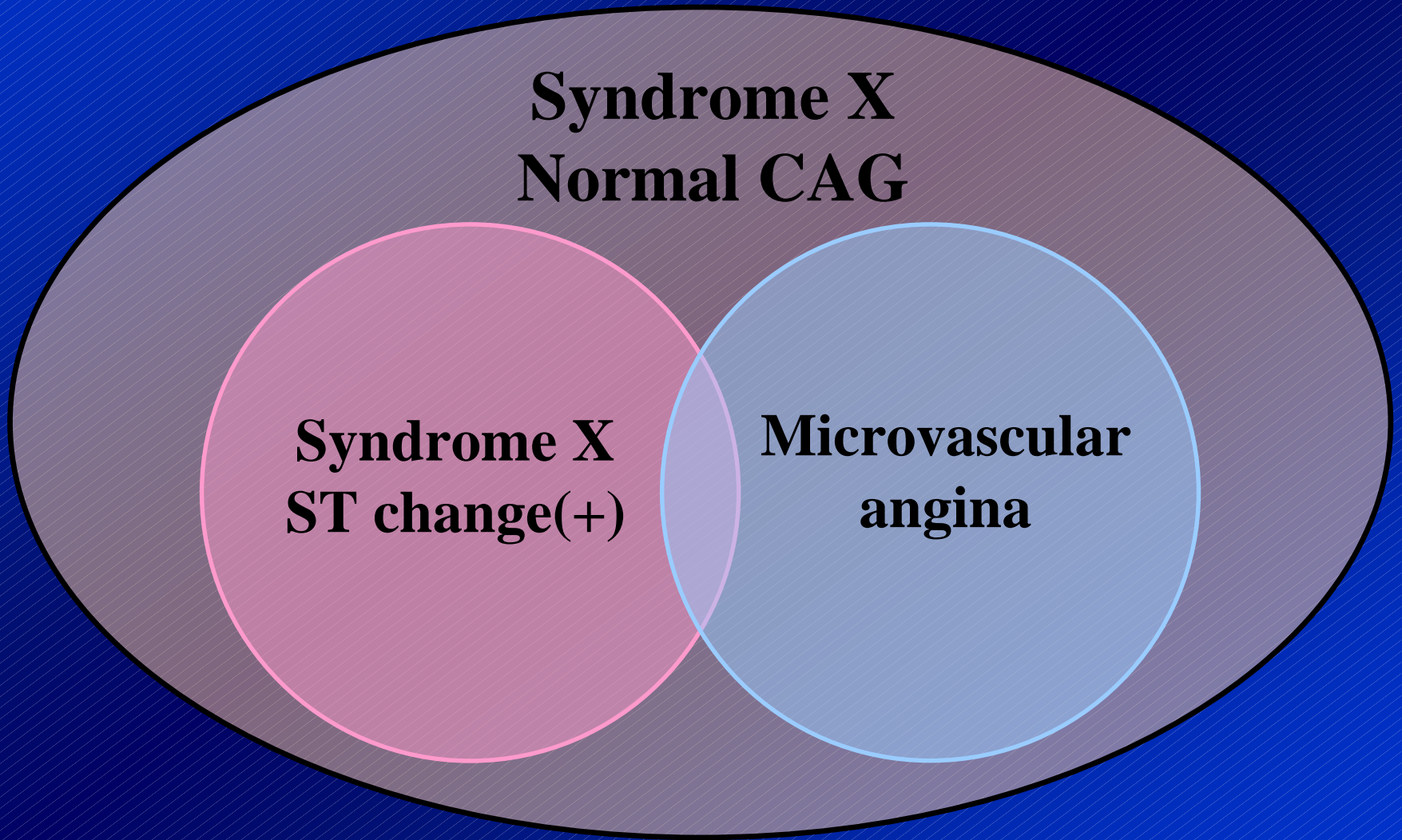
ACRE: Appropriateness of Coronary Revascularization Study

Chest Pain

Syndrome X
Normal CAG

Syndrome X
ST change(+)

Microvascular
angina



微小血管狭心症例

症 例： 54歳、女性

主 訴： 前胸部圧迫感

現病歴： 平成13年7月夕方、炊事の途中、突然前胸部圧迫感を自覚した。約15分間持続した後、安静にて自然に寛解。

以降、1週間に1回程度の頻度で主に夜間就寝後や早朝に同様の症状が出現するようになった。

閉経 52歳。

喫煙歴 なし。

アセチルコリン負荷時の心電図変化

四肢誘導

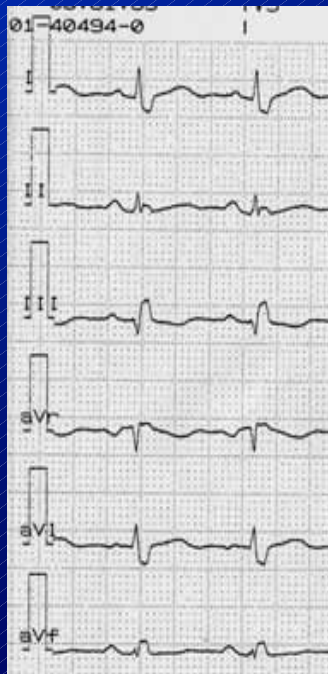
胸部誘導

Control

L-ACh 100 μ g

Control

L-ACh 100 μ g

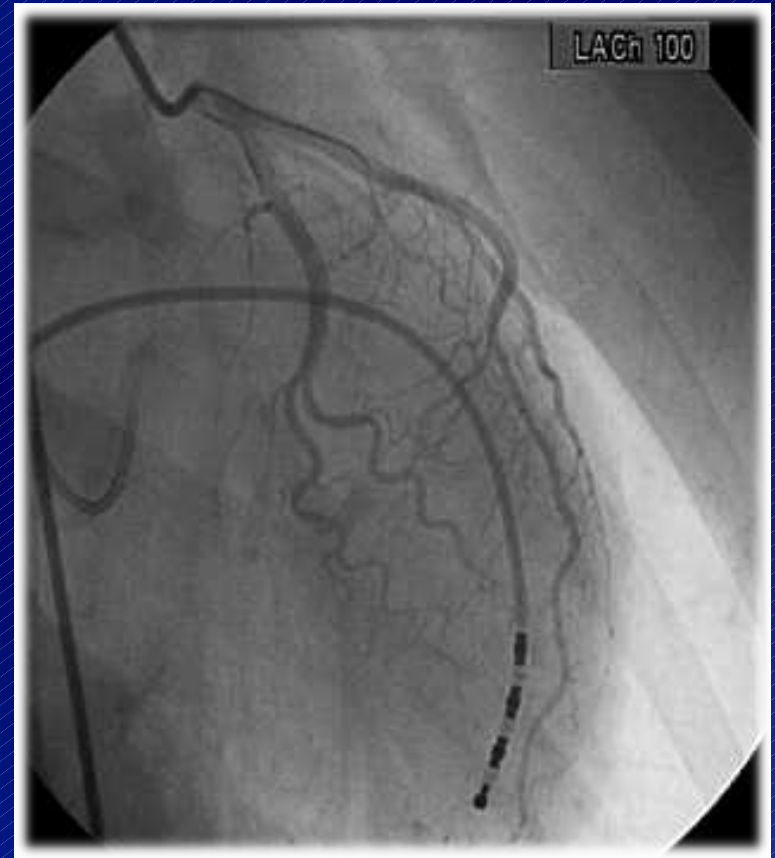


症状: アセチルコリン投与直後にいつもと同様の胸部圧迫感を自覚する。

微小血管狭心症の冠動脈造影

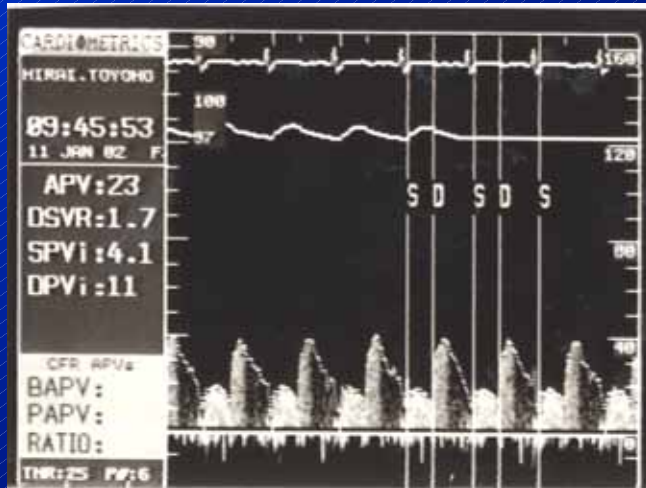


Control

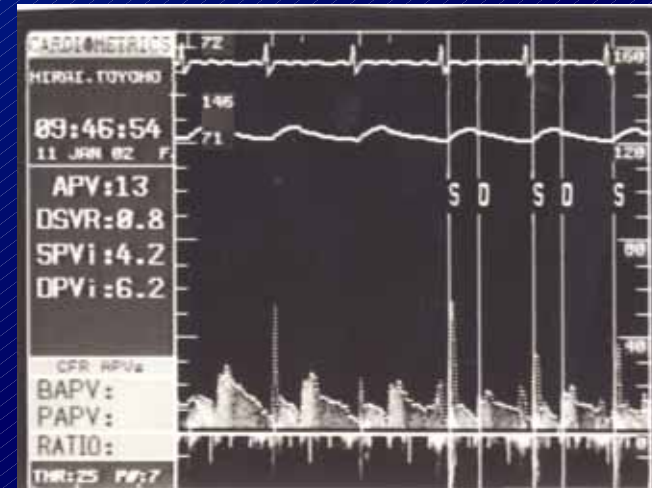


LACh 100 μ g

アセチルコリン投与時の冠血流速および乳酸摂取率変化



Pre Ach 100 μ g



Post Ach 100 μ g

乳酸値 (mg/dl)

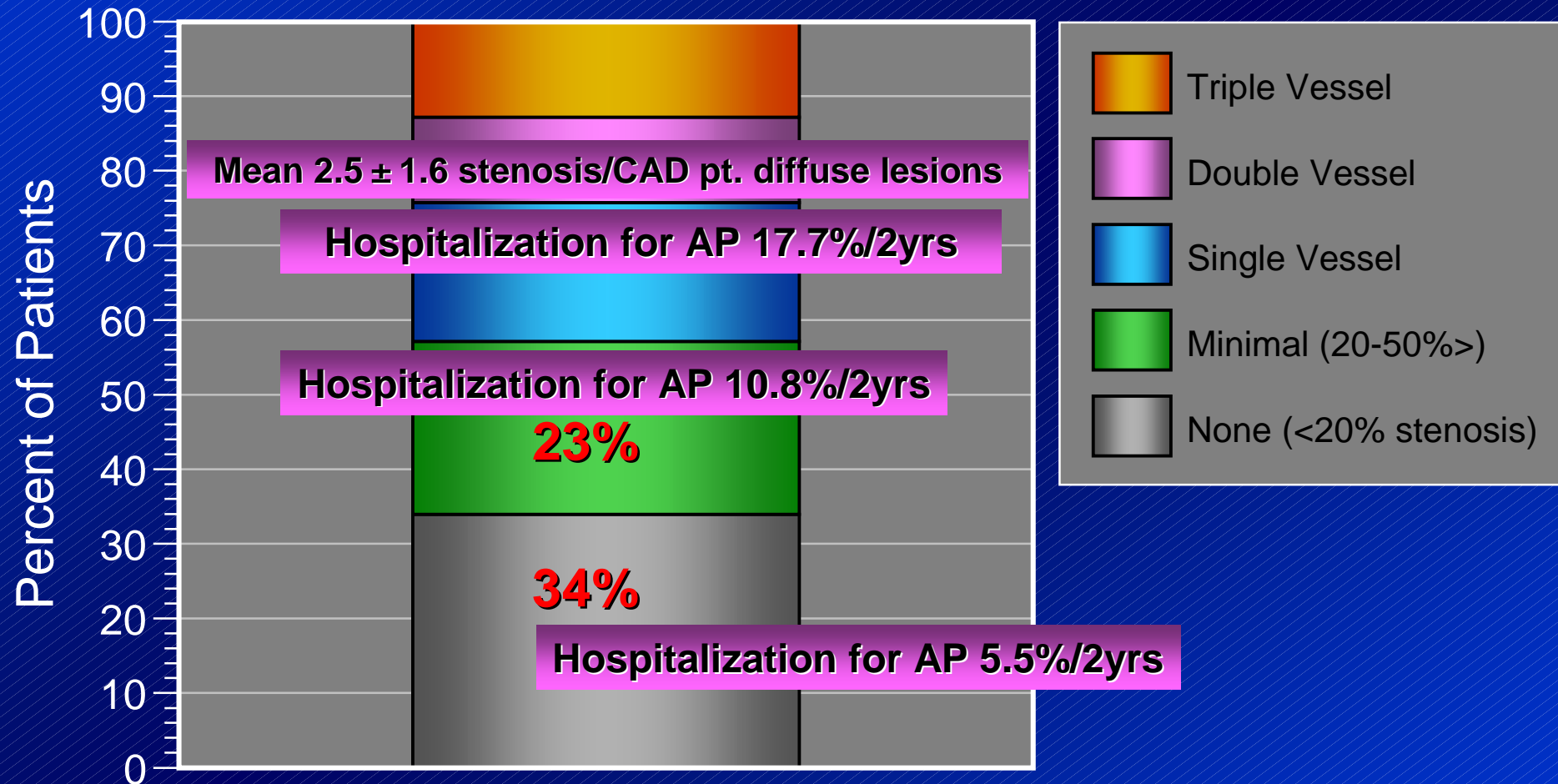
	大動脈	冠静脈洞	乳酸摂取率(%)
Control	4.81	2.79	42.0
L-Ach 100 μ g	4.03	6.25	-55.1

冠微小血管攣縮

1. 安静時の胸部圧迫感 (+)
2. アセチルコリン負荷にて症状を伴う心電図変化 (+)
 - 乳酸摂取率逆転 (+)
 - 冠血流速の低下 (+)
 - 造影にて攣縮 (-)
3. 本症例はnisoldipine 10mgの投与開始にて症状のコントロールがつかず、HRTを併用してコントロール可能となった。

WISE Pilot Study: CAG所見

N=323 (Women with suspected ischemic chest pain, meanEF: 66%)

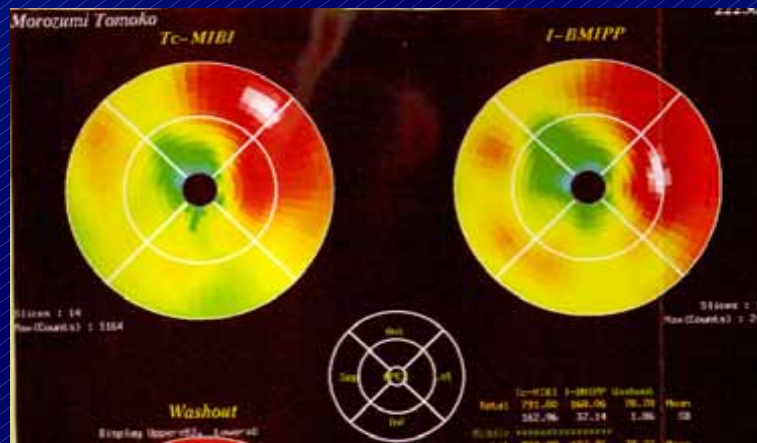
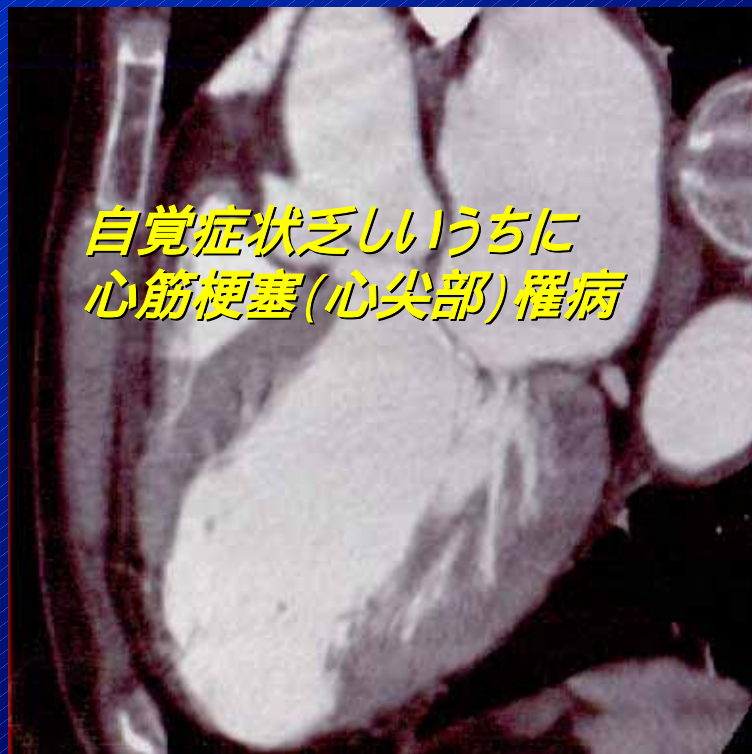


T.M. 69歳、女、身長154cm 体重 45kg (BMI 19)

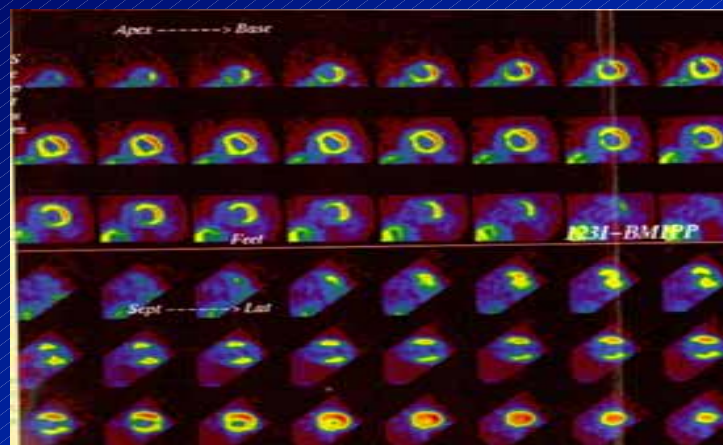
主訴: 労作時息切れ、胸痛発作、心拡大

危険因子: 高血圧(加療中)、高脂血症(加療中)、高尿酸血症、喫煙10/日、父糖尿病

心臓核医学検査(TI / BMIPP: 心筋灌流 / 代謝)



心臓核医学検査 (TI: 心筋灌流)



日本医科大学放射線科
林宏光教授提供

T.M. 69歳、女、身長154cm 体重 45kg (BMI 19)

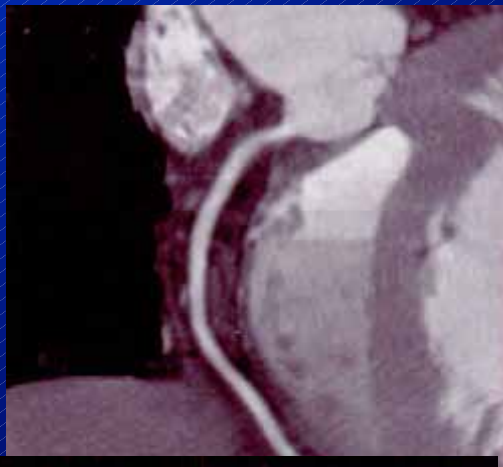
主訴: 労作時息切れ、胸痛発作、心拡大

危険因子: 高血圧(加療中)、高脂血症(加療中)、高尿酸血症、喫煙10/日、父糖尿病

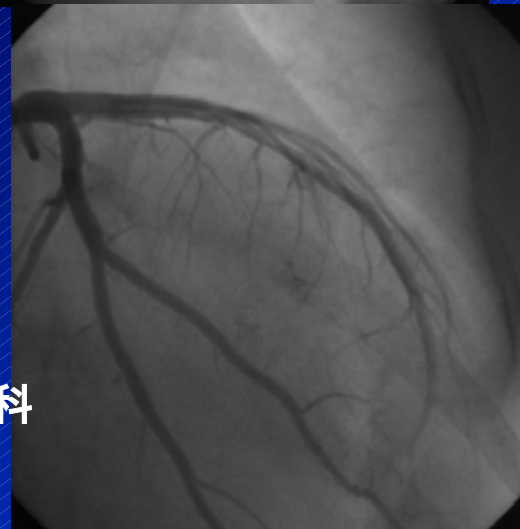
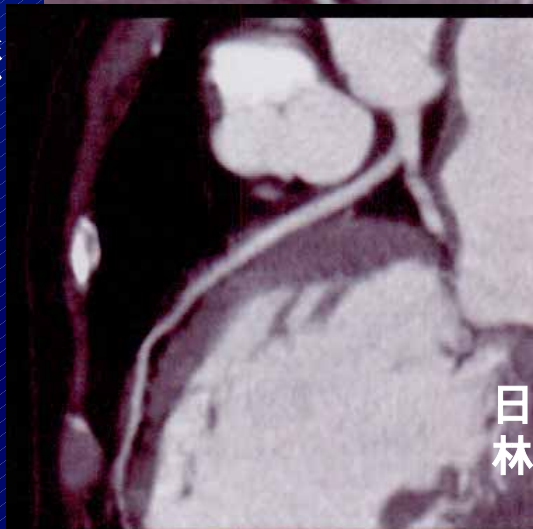
マルチスライスCT

心臓カテーテル・冠動脈造影

右冠動脈



左冠動脈



日本医科大学放射線科
林宏光助教授提供

非侵襲的冠動脈疾患検出法の比較

検出法	感度/特異度(%)	所要時間	費用(円)
安静時心電図	20?/?	10分	1,500
マスター運動負荷試験	28 ~ 66/70 ~ 85	30分	3,500
トレッドミル試験	70 ~ 80/82 ~ 97	30分	7,000
ホルター心電図	30 ~ 40?/?	24時間	15,000
超高速CT	71 ~ 74/70 ~ 90	10分	13,840
経胸壁冠動脈エコー図	93/93 (左前下降枝)	10分	11,500
運動負荷心筋シンチグラム	80 ~ 90/85 ~ 95	5時間	104,210

性差医療情報ネットワーク

2003年8月 設立

<http://www.nahw.org/>

NAHW (New Approach to Health and Welfare)

企業会員

ホーム 新規会員登録 会員専用サイト NAHW支部会 search

性差医療情報ネットワーク NAHW

女性外来情報
男性外来情報
疾患情報
●
●
●

国内情報
ニュース
メッセージ
学会・セミナー
文獻集
統計資料
お物のサイト

海外情報
ニュース
メッセージ
学会・セミナー
文獻集
統計資料
お物のサイト

医療情報誌

国内の学会・セミナー情報

2005年度(平成17年度):

- 講演会「このころの医療—女性編—」
日時: 2005年3月13日(日)13:00~15:40
場所: 山口グランドホテル(新山口駅新幹線口前)
対象: 女性の患者さんの医療に携わっておられる方などでも
(医師、看護師、助産師、薬剤師、検査技師、保健師、臨床心理士、他)
参加費: 無料
- 日時: 2005年3月13日(日) 10:00~16:00
女性外来担当医師のための漢方入門セミナー YOKOHAMA
会場: ホテルキャロット・ジャパン (旧ホテルリッチ横浜)
横浜市西区北幸 1-11-3 電話 045-312-2111
株式会社ツムラ横浜支店
- 第一回 千葉・女性医療と漢方を考える会
日時: 平成17年3月12日(土) 18:00~20:30
会場: ホテルサンガーデン千葉 3F 楽
千葉県中央区中央1丁目11-1
TEL 043-224-1131

性差と医療

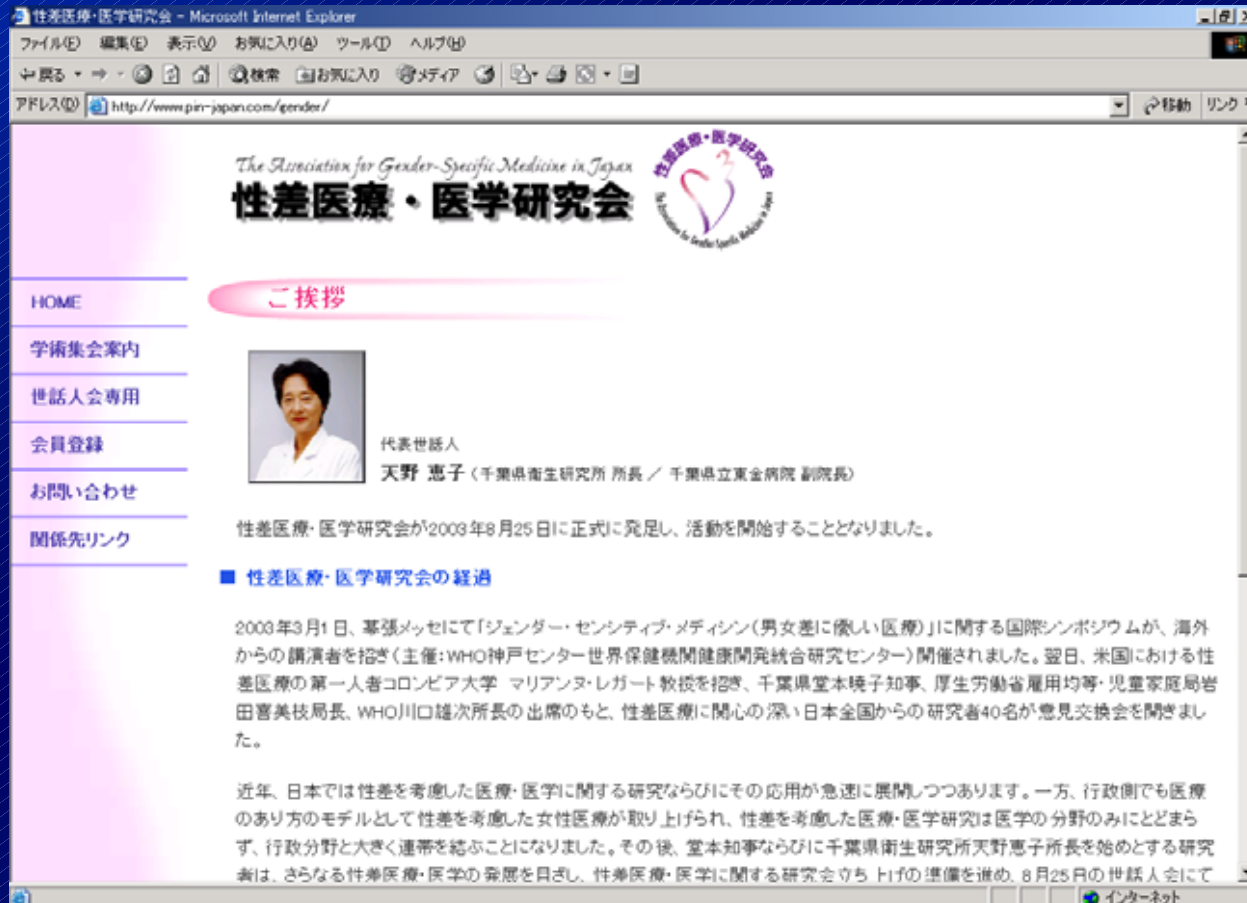
<http://www.nahw.org/index/Seminar.htm>

インターネット

性差医療・医学研究会

2004年8月 設立

<http://www.pin-japan.com/gender/>



性差医療・医学研究会 - Microsoft Internet Explorer

ファイル(F) 編集(E) 表示(V) お気に入り(I) ツール(T) ヘルプ(H)


戻る (←) 進む (→) 検索 (🔍) お気に入り (📌) メディア (📁) 印刷 (🖨) リンク (🔗)

アドレス (📄) <http://www.pin-japan.com/gender/>

The Association for Gender-Specific Medicine in Japan
性差医療・医学研究会

HOME
学術集会案内
世話人会専用
会員登録
お問い合わせ
関係先リンク

ご挨拶



代表世話人
天野 恵子 (千葉県衛生研究所 所長 / 千葉県立東金病院 副院長)

性差医療・医学研究会が2003年8月25日に正式に発足し、活動を開始することとなりました。

■ 性差医療・医学研究会の経緯

2000年3月1日、基強メッセにて「ジェンダー・センシティブ・メディシン(男女差に優しい医療)」に関する国際シンポジウムが、海外からの講演者を招き(主催:WHO神戸センター世界保健機関健康開発統合研究センター)開催されました。翌日、米国における性差医療の第一人者コロンビア大学 マリアンタ・レガート教授を招き、千葉県堂本暎子知事、厚生労働省雇用均等・児童家庭局岩田喜美枝局長、WHO川口雄次所長の出席のもと、性差医療に関心の深い日本全国からの研究者40名が意見交換会を開きました。

近年、日本では性差を考慮した医療・医学に関する研究ならびにその応用が急速に展開しつつあります。一方、行政側でも医療のあり方のモデルとして性差を考慮した女性医療が取り上げられ、性差を考慮した医療・医学研究は医学の分野のみにとどまらず、行政分野と大きく連帯を結ぶことになりました。その後、堂本知事ならびに千葉県衛生研究所天野恵子所長を始めとする研究者は、さらなる性差医療・医学の発展を旨とし、性差医療・医学に関する研究会立ち上げの準備を進め、8月25日の世話人会にて

インターネット

性差と医療

GENDER & SEX SPECIFIC MEDICINE



座談会

女と男の
よりよい
医療を目指して

創刊
事前号
無料

Vol.1 No.0

6

Jun.2004

- 連載 漢方療法と女性医療—今、なぜ漢方か
- Current Topics AHAが女性のための心血管疾患予防ガイドライン発表
- Monthly Report '04年度全国調査報告：全国化する女性外来
- Special Report 新・性差基準で無駄な治療をなくす

じほう