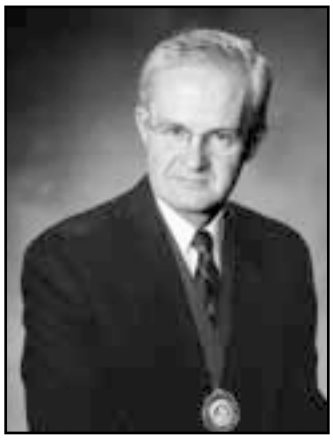
Canadian Urological Association

Spring 2002 Newsletter



James Wilson, M.D., FRCS(C),
President, CUA

In this issue...

Publications Mail Agreement Number 1756958

PRESIDENT'S MESSAGE

The registration brochures for the Annual CUA Meeting in St. John's June 23 -26 have been mailed and all members should have the information. Details for the meeting are also found through the main CUA web site www.cua.org - just follow the links to the Annual Meeting site. This promises to be an exceptional meeting – both scientifically and socially. Hopefully as many members as possible will be able to attend. Curtis Nickel, Doug and Zoe Drover and their Committees continue to work very hard arranging the final details to ensure a successful meeting. The scientific program looks to be exceptional with provocative educational forums on a variety of controversial and difficult problems in clinical urology supported by a range of excellent guest speakers. There will be a limited range of podium paper presentations that are restricted to topics of broad interest to the general membership. The basic science research and more specialized clinical papers will be presented at poster sessions to provide ample opportunity for discussion between those who are most interested. The poster sessions will be informal, with wine and cheese available to encourage free discussions among the participants. The social program will surely be memorable with lots of entertainment from local Newfoundland musicians. The recent Juno Awards from St. John's provided a taste of what Canada's newest province has to offer. There will be lots of good food too – and enough liquid refreshment to quench any thirst after a hard days discussions. Plan to join us for what should be a memorable meeting.

CUA members will have recently received the second of the Patient Information Brochure packages that have been prepared by the Patient Information Committee chaired by Denis Lavoie. There are now 10 separate brochures available with another five in draft stage that should be available in the early fall. Further pamphlets are being planned. Congratulations to Denis and his Committee members. According to the reports on the numbers of pamphlets requested, this is an initiative that is needed by practicing urologists in Canada and is appreciated by the membership. Please direct any comments or suggestions to Denis who continues to do the "heavy lifting" on this project. Denis has seen this project through from initial conceptual stage to final production. All of us are in his debt for sticking with this project through all the trials of development and production. It has been an immense task. Thanks Denis.

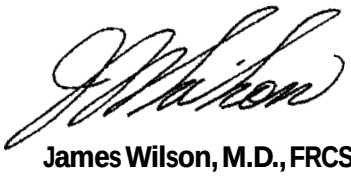
The CUA continues to evolve. With the development of the Patient Information Pamphlets, the Guidelines, the CUA web site, the day to day activities of the association increase. We anticipate that the CUA will become an accredited provider for the Royal College Maintenance of Certification Program, which also will require significant expenditure. With all of this increased activity, the funding required to support all these activities will necessarily increase as well. As you know the CUA dues have not changed in a number of years and we are

PRESIDENT'S MESSAGE (cont'd)

able to continue to provide these benefits to members because of the surplus generated at our annual meetings. In the past, whatever is required has been spent and we have been fortunate that there have been sufficient funds to cover the expenditures. However, the time has come that the association should formalize its annual expenditures. To this end, I have asked the CUA treasurer, Jerzy Gajewski to prepare a budget for 2002-03 to be presented to the membership at the Annual General Meeting to be held June 26, 2002 in Salon A at the Delta Hotel at 12:00 PM. In this way, the membership will not only see what funds have been generated as has been the case every year, but will have a voice as to how the funds are spent.

Hope to see as many as possible in St. John's.

Cheers.



James Wilson, M.D., FRCS(C),
President, Canadian Urological Association

FUTURE CUA MEETINGS

2003
Montreal, QC
Bonaventure Hotel
June 22-26

2004
Whistler, BC
Chateau Whistler
June 27-July 1

2005
Ottawa, ON
Westin Hotel
June 25-29

2006
Halifax, NS
Eastern Canada
June 25-29

2007
City Pending
Central Canada
June 24-28

2008
Edmonton, AB
Shaw Conference Center
June 22-28

WHERE ARE THEY NOW?

Association mailings to the following members have been returned with addresses marked as incorrect. If any members know of the current addresses or even the towns involved, please forward this information to:

Dr. Michael P. Chetner,
Secretary, Canadian Urological Association
2D2.13, Walter MacKenzie Health Sciences Center
8440-112 Street, Edmonton, Alberta
Telephone: (780) 407-3283
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Dr. John Bishop
Dr. J. Bourgouin
Dr. John Brewster
Dr. George Chenard
Dr. Gerald Cook
Dr. Leslie Deane
Dr. Shamoon Doctor
Dr. Adam Gavsie
Dr. James Glenn
Dr. Andrew Halsall
Dr. Peter Ho
Dr. Jonathan Izawa
Dr. Douglas Johnson
Dr. Richard Johnson
Dr. H. Kiruluta
Dr. Frederic Liandier
Dr. Sue McGarvie
Dr. Stephen Macisaac
Dr. Gary Mackie
Dr. Gordon Martyn
Dr. Brian Morris
Dr. John Ngan
Dr. Garry Peers
Dr. Manohar Rajani
Dr. Nicholas Rety
Dr. Bernard Robinson
Dr. John Schneiderman
Dr. Walerian Spakowski
Dr. Thomas Trinh
Dr. Getchel Williams
Dr. Carson Wong

SCIENTIFIC PROGRAM: St. John's 2002

Day 1: Sunday, June 23, 2002

09:00 – 17:00 Registration Desk Open
11:00 – 12:30 Brunch for all Registrants
11:00 – 17:00 Exhibit Hall Open
12:30 – 12:40 Scientific Sessions begin with Introduction
12:40 – 13:40 Podium Session – Urologic Pot Pourri
13:40 – 14:45 Podium Session – Endourology/Laparoscopy
14:45 – 15:15 Health Break
15:15 – 15:45 Guest Speaker – Dr. Elspeth M. McDougall
15:45 – 17:15 Educational Forum – Metabolic Stone Disease
19:00 – 22:00 Welcoming Reception – Fairmont Hotel

Day 2: Monday, June 24, 2002

07:00 – 17:00 Registration Desk Open
06:30 – 07:30 Continental Breakfast
07:00 – 08:30 Educational Forum – Bladder Cancer
08:30 – 14:30 Exhibit Hall Open
08:30 – 09:30 Podium Session – Oncology
09:30 – 10:00 Health Break
10:00 – 10:30 Guest Speaker – Dr. Michael Droller
10:30 – 12:00 Educational Forum – Prostate Cancer
12:00 – 12:30 Guest Speaker – Dr. Richard D. Williams
12:30 – 12:40 AUA Presidential Address
12:40 – 13:30 Lunch with Exhibitors
13:30 – 14:30 Podium Session – Prostate Cancer
14:30 – 15:00 Guest Speaker – Dr. Alan Partin
15:30 – 17:30 Poster Session A – Oncology
Poster Session B – Teaching and Miscellaneous
Poster Session C – Basic Science
Poster Session D – Endourology/Laparoscopy
18:30 – 24:00 Lobster Fun Night – Delta Hotel

Day 3: Tuesday, June 25, 2002

07:00 – 13:00 Registration Desk Open
06:30 – 07:30 Continental Breakfast
07:00 – 08:30 Educational Forum – Erectile Dysfunction
08:30 – 12:00 Exhibit Hall Open
08:30 – 09:30 Podium Session – Impotence, Infertility & Incontinence
09:30 – 10:00 Health Break
10:00 – 10:30 Guest Speaker – Dr. Michael O'Leary
10:30 – 12:00 Educational Forum – Incontinence
12:00 Golf and other Optional Activities

Day 4: Wednesday, June 26, 2002

07:00 – 13:00 Registration Desk Open
06:30 – 07:30 Continental Breakfast
07:00 – 08:30 Educational Forum – Andropause
08:30 – 12:45 Exhibit Hall Open
08:30 – 09:00 Guest Speaker – Dr. Ian Thompson
09:00 – 09:30 Health Break
09:30 – 10:00 Podium Session – Pediatric Urology
10:00 – 10:15 Prize Essay Presentations
10:15 – 10:45 Guest Speaker – Dr. David Bloom
10:45 – 12:00 Educational Forum – Pediatric Urology
12:00 – 14:00 CUA Annual General Lunch Meeting
14:30 – 16:30 Poster Session E – Pediatric Urology
Poster Session F – Incontinence
Poster Session G – Erectile Dysfunction/Infertility
Poster Session H – Prostate Cancer
18:00 – 24:00 Closing Banquet – Delta Hotel

AFFILIATED SOCIETIES AND COMMITTEES

Friday, June 21, 2002

08:00 - 16:00	CUA Guidelines Committee	Delta Hotel - Bonavista Bay
08:00 - 16:00	CUA Patient Information Committee	Delta Hotel - Trinity Bay
08:00 - 16:00	CUA Socioeconomics Committee	Delta Hotel - St. Mary's Bay
12:00 - 17:00	CUA Committee on Training, Education and Evaluation (Royal College Specialty Committee for Urology)	Delta Hotel - Placentia Bay
19:00 - 23:00	Canadian Academy of Urologic Surgeons Annual Dinner	Admiral's Green, Pippy Park

Saturday, June 22, 2002

07:00 - 12:00	Canadian Academy of Urologic Surgeons	Fairmont Hotel - Salon C, D
13:00 - 17:00	CUA Executive Committee Meeting	Delta Hotel - Salon C
13:00 - 15:00	Canadian Prostate Health Council	Delta Hotel - Fortune Bay

Sunday, June 23, 2002

07:00 - 12:00	CUA Executive Meeting	Delta Hotel - Salon C
07:00 - 09:00	CUOG Executive Meeting	Delta Hotel - Fortune Bay
08:00 - 12:00	Pediatric Urologists of Canada (PUC) Meeting**	Fairmont Hotel - Garrison/Signal
09:00 - 12:00	CUOG Annual Meeting	Delta Hotel - Salon D
10:00 - 12:00	Canadian Endourology Group	Delta Hotel - Conception Bay

Monday, June 24, 2002

07:00 - 08:30	Canadian Journal of Urology (Board Meeting)	Delta Hotel - Duckworth
10:00 - 12:00	CUASF Scientific Council	Delta Hotel - Gower
12:00 - 14:00	CUASF Administrative Council	Delta Hotel - Duckworth
12:00 - 14:00	CUA Nominating Committee	Delta Hotel - Cochrane
16:00 - 18:00	Urology Nurses of Canada	Delta Hotel - Placentia Bay

Tuesday, June 25, 2002

07:00 - 08:30	Urology Times of Canada (Board Meeting)	Delta Hotel - Gower
07:00 - 09:00	Council of Canadian University Urology Chairs	Delta Hotel - Cochrane
07:00 - 09:00	Canadian Urological Research Consortium	Delta Hotel - Placentia Bay

Wednesday, June 26, 2002

07:00 - 08:30	Societe Internationale d'Urologie	Delta Hotel - Conception Bay
08:00 - 11:00	Canadian Male Sexual Health Council	Delta Hotel - LeMarchant
09:30 - 12:00	CUA Finance Committee	Delta Hotel - Placentia Bay
12:00 - 14:00	CUA Annual General Meeting	Delta Hotel - Salon A
14:30 - 16:00	Exhibitors Committee Meeting	Delta Hotel - Placentia Bay

** *Pediatric Urologists of Canada (PUC) is a CUA affiliate open to all urologists and residents with a significant interest or clinical practice in pediatric urology. The program includes breakfast, lunch, business meeting and case presentation. All are invited to bring one interesting case for discussion.*

CANADIAN ACADEMY OF UROLOGICAL SURGEONS

Dear Members,

Looking forward to seeing you at the Academy meeting in St. John's, Newfoundland. The meeting will start with a wonderful dinner Friday night, June 21, 2002 at Admiral's Green Golf Course, which is in Pippy Park overlooking the city. There will be a reception at 6:30 with dinner to follow at 7:00.

The next morning June 22, 2002, our meeting starts at 07:00 at the Fairmont Hotel, Salon C, D. We are going to focus on the teaching and evaluation of surgical skills to both medical students and urological trainees. Dr. Martin Friedlich a general surgeon / educator from University of Ottawa will present to us his experience with teaching and assessing surgical skills in medical students using a series of laboratory models. Drs. Sid Radomski and Eddie Matsumoto from U of T will present their experience with the surgical skills lab at U of T. Dr. Andrew MacNeily from UBC will present the western angle on surgical skills labs. Dr. Armen Aprikian from McGill will present a method for evaluation of live surgical skills in residents (i.e. documentation of appropriate operative skills in a step by step fashion).

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Jerzy B. Gajewski, Secretary/Treasurer
Phone: (902) 425-3940 / Fax: (902) 422-0033
E-mail: jgajew@is.dal.ca

CUASF SCHOLARSHIP ANNOUNCEMENT

Request for Applications:

3 categories of support

1. University-based researcher, $40 000, for recent (within 2 years) Canadian, University Faculty Appointment at level of Assistant Professor or Lecturer, 1 year term, renewable based on merit and availability of funds.
2. Community-based researcher, $15 000 non-renewable for specific project. For details and application forms, interested individuals can write to Dr. Tony Khoury, Scientific Chair of CUASF.
3. CUA – SIU International Scholarship

Deadline March 1st of each year, for academic funding year commencing July 1st.

Submit applications to:

Dr. Tony Khoury
Chair, Scientific Council, CUASF
555 University Ave.
Toronto, Ontario, M5G 1X8
Telephone: (416) 813-6460,
Fax: (416) 813-6461
Email: tony.khoury@sickkids.on.ca

CUA PATIENT INFORMATION BROCHURES

Ten topics now available as a complementary benefit of CUA membership

Series 1

Vasectomy
Vasectomy – *Discharge Instructions*
Cystoscopy
Cystoscopy – *Discharge Instructions*
Prostate Ultrasound and Biopsies

Series 2

Childhood Circumcision
Childhood Circumcision – *Discharge Instructions*
Trans-urethral Resection of the Prostate
Trans-urethral Resection of the Prostate – *Discharge Instructions*
Kidney Stones

Series 3 Available soon!

To order brochures, please contact:

CUA Patient information
Tel: (514) 744-1184 • Fax: (514) 744-1138
Email: CUAbrochures@ca.inter.net

NOMINATIONS PROCESS FOR CUA

The Nomination process is designed to increase the membership's awareness of the positions up for nomination and to improve the transparency, fairness and the appropriateness of the nomination process. This process will involve the posting of the vacancies open for the Nominating Committee to fill in the Spring Newsletter and on the CUA website. Interested parties (CUA members in good standing) can have there name put forward (by a CUA member in good standing) to the Nominating Committee Chair, (Past-President). The Chair of the Nominating Committee will bring all potential candidates' names forward to the Committee members for review. If more than one person's name is recommended to be brought forward, for a single position, then the potential candidates will be contacted by the Committee or it's Chair to discuss the responsibilities of the position in question. If more than one person wants to let their name stand for a single position, and the Committee deems the candidates to be appropriate, then an election will take place, either by ballot or at the time of the Annual General Meeting, in which all CUA members will vote. A single candidate will emerge from the election for the position. As always, candidates can be nominated from the floor of the AGM. They must be nominated by a member in good standing and be present at the meeting to accept the nomination and stand for election.

NOMINATIONS OPEN FOR 2002 AGM

Vice-President
(President in Ottawa 2005)

Chair of the Socioeconomic Committee
(to replace to Allan Patrick term ending 2002).

The following will be nominated from the floor of the 2002 Annual General Meeting in St. John's, Newfoundland:

2 Members of the Awards Committee - one year term
(to replace Drs. Laurence Klotz & Martin Gleave)

2 Members of the Nominating Committee – two year term
(replacing Drs. Peter Anderson & John Mahoney)

Please submit nominations or inquiries to:

Dr. Gordon McLorie, Past President, CUA
555 University Ave.
Toronto, ON M5G 1X8
Telephone:)416) 813-6465
Fax: (416) 813-6240
E-mail: gmclorie@sickkids.on.ca

BY LAW CHANGES: SPRING 2002

(e) The Socioeconomics Committee.

(i) The Socioeconomics Committee shall consist of a Chair. The Chair shall recruit members as necessary to provide input into issues that are undertaken by the Committee (Section (e)iii). Selection of members should reflect the geographic regions of the country, and represent both academic and community urology interests as much as possible.

(ii) The Committee shall include a member in good standing who acts as a liaison for the Association with the Canadian Medical Association. This individual shall be elected annually by the Voting Members of the Association. He/She shall be eligible for re-nomination and re-election annually, not exceeding four (4) terms. He/She shall report to the Executive, submit an annual report in writing to the Executive and shall report to the Members annually at the business session of the Annual Meeting.

(iii) The Chair shall be elected annually by the Voting Members of the Association. He/She shall be eligible for re-nomination and re-election annually, not exceeding four (4) terms. Other members of the Committee shall serve a term not exceeding five (5) years. A term or terms of office in the Predecessor shall be counted in calculating the maximum term or number of terms of office as specified above.

(iv) The Socioeconomics Committee shall concern itself with all practical aspects of urological practice in Canada. This may include:

A. information relating to average incomes and fee schedules;
B. manpower data including the number of urologists in practice, the number of residents in training and the number who leave or enter the country;
C. the exchange of information on financial matters such as fee negotiations, alternate methods of remuneration, income caps, relative value fee guides and other similar topics of interest to the Members;
D. the review of utilization issues such as hospital and bed closures and other similar topics of interest to the Members; and
E. standards of access to resources necessary for urological practice, including new technologies, operating time, call schedule demands

(v) The Socioeconomics Committee shall meet annually at the time of the Annual Meeting. Additional meetings may be held at the expense of the Association with permission of the Executive.

(vi) The Chair shall submit an annual report in writing to the Executive and shall report to the Members annually at the business session of the Annual Meeting.

CUA GUIDELINES COMMITTEE PROPOSED:

ERECTILE DYSFUNCTION GUIDELINES

Summary of recommendations

- Erectile Dysfunction (ED) is the preferred clinical term describing the inability to achieve and maintain a penile erection of sufficient rigidity to permit satisfactory sexual activity.
- Diagnosis and treatment of ED is often, most effectively performed by Primary-Care Physicians (PCP).
- The underlying risk factors associated with ED are common to cardiovascular disease in general, and therefore may represent the initial clinical sign of generalized vascular insufficiency.
- PCP's, urologists, internists, psychiatrists, and other treating health-care professionals should be encouraged to initiate an open dialogue of sexual issues to identify men with ED who may not otherwise volunteer their sexual concerns.
- Frequently a careful history, physical exam, serum glucose, lipids and optional testosterone testing are all that are needed to make the diagnosis of ED and initiate therapy.
- Organic (physical) causes of ED are present in the majority of men, but situational contributing factors often play a contributory role and addressing these issues may enhance treatment efficacy.
- Once reversible causes of ED are ruled out, a trial of oral medication is recommended as first-line therapy, based on treatment efficacy, side effect profile and minimal invasiveness.
- Specialized testing and referral are generally reserved for cases where greater insight into the etiology is desired by the patient/physician and/or oral first-line treatment was unsuccessful or not appropriate.
- Second-line therapies although more invasive than oral agents, are generally well tolerated and effective.
- Surgery remains an important option for those men refractory to medical management, offering durable reliable relief from ED.

Background

Erectile dysfunction is a highly prevalent condition, which impacts on the quality of life of thousands of Canadian couples. Dramatic advances in our understanding of the pathophysiology of erection has led to the development of new highly effective, minimally invasive therapeutic agents. Traditionally, the choices of treatment for ED have been under the direction of urologists. Surgical approaches (malleable and inflatable penile implants) were the only genuinely effective therapy for decades. The introduction of intra-cavernous vasoactive agents in the mid-1980's changed the balance of care with larger numbers of men seeking non-surgical options.

Primary care physicians are rapidly acquiring the diagnostic and therapeutic skills necessary to become the dominant healthcare providers for this condition. Armed with effective oral agents like the PDE-5 inhibitors, and the promise of a multitude of other new oral and sublingual agents in the research pipeline, ED is becoming more a medical clinical entity. Family physicians, internists, cardiologists and other medical specialists are being approached by couples with ED requesting treatment. In many cases longstanding relationships exist between the couple and their treating physician, fostering an important therapeutic alliance which may translate into improved clinical response to the selected treatment approach. A shared-care model for the treatment of ED, in which PCP initially identify and treat patients with ED and refer those individuals who require more invasive or specialized testing and treatment, is a valid concept. The combined experience and knowledge of primary care physicians coupled to the diverse knowledge of the specialist can ideally result in optimal care for the patient.

In spite of these changes in the approach to management of ED and the increasingly important role played by other healthcare providers, urologists remain an essential element in ED therapy for several important reasons.

1. In some cases anatomical penile deformity may play an important role in the ED (frequently requiring operative correction).
2. Intracavernous and intraurethral vasoactive therapy are considered by some primary care physicians as invasive techniques, which they are unable or unwilling to teach patients.
3. Historically, urologists were the consulting physicians for ED and are still the primary referral requested for the difficult, oral-refractory cases.
4. In a small but definable population (often those men with severe vascular disease or poorly controlled diabetes) the nonsurgical approaches may not succeed, requiring surgical options in the difficult to treat group.
5. Ongoing research into the basic and clinical consequences of ED is performed in urology labs and offices world-wide.

It is for these reasons that the Canadian Urological Association Guidelines Committee, in association with the Canadian Male Sexual Health Council undertook to develop an approach to management of the patient with ED. This is a rapidly expanding field with many new therapeutic options available to physicians and patients. We based our suggestions for management on peer reviewed literature, the 1999 WHO consensus panel, the

evolving research on new medical approaches to ED management and placed these comments and recommendations into a Canadian perspective.

Global management objectives

1. To help the patient and partner establish their objectives of treatment.
2. To select diagnostic tests based on the patients presenting complaints and goals of therapy.
3. To utilize diagnostic tests in a cost effective and meaningful manner which impact choice of treatment.
4. To provide a diagnosis and understanding of the likely etiology of the erectile dysfunction to the patient and partner.
5. To offer treatment choices with comprehensive information on cost, likelihood of success and common side-effects.
6. To initiate therapy with the least invasive option which satisfies the patient and partner goals of treatment.
7. To provide patients with information concerning treatment related risks and benefits as well as ongoing support so as to maximize treatment success.
8. To re-establish the couples ability to achieve and maintain sexual intimacy in as natural a manner as possible.
9. To choose approaches which are reversible whenever possible.

Management approach

Diagnosis

1. Determine that the problem is ED, not premature ejaculation, sexual dysfunction from other causes (Peyronie's, low desire state).
2. Determine the timing of onset, nature of the problem and significance to the couple.
3. Evaluate whether a potentially reversible cause to the ED exists (medication, stress, depression, hormonal, tobacco, alcohol, drugs, partner specific issues).
4. Establish a likely underlying etiology based on the history, physical exam and lab testing (optional). A commonly used schema is:
   - Vascular
   - Endocrine
   - Neurological
   - Situational
   - End organ (penile deformity)
   - Mixed

Methodology

1. History and clinical questioning (this is the most important component of the ED evaluation).
2. Physical examination (directed at neural and vascular systems essential for erections).
3. Use of formalized questionnaire instruments (IIEF*, SHIM*).
4. Labs: serum glucose, hormonal screening (total Testosterone/ bioavailable), lipid screening.
5. Consultation with subspecialists (endocrinology, psychology, cardiology).
6. Specialized tests:
   a. Combined injection and stimulation test (CIS)
   b. Nocturnal penile tumescence testing (Rigiscan)
   c. Duplex ultrasound with vasoactive penile injection/ sildenafil
   d. Dynamic infusion cavernosography and cavernosometry (DICC)
   e. Penile Angiogram

See in attached Appendix:
*Sexual Health Inventory for Men,
*International Index of erectile function

Treatment options

1. Sexual counseling (this may represent a spectrum of approaches from a simple open discussion with the PCP to sexual therapists or psychiatry expert in intimacy building and sensate focus therapy).
2. Oral therapy (PDE-5 & hormonal).
3. Vacuum Therapy.
4. Local Therapy (intra-urethral or intracavernous agents).
5. Surgery:
   a. Penile Implant
   b. Peyronie's Surgical Repair
   c. Vascular bypass procedure (generally reserved for young men following traumatic penile vascular injury)

Diagnosis

History

This is the cornerstone of the evaluation of sexual and erectile dysfunction. The history will provide the likely diagnosis in the vast majority of cases. There exist a variety of approaches to obtain a thorough history, with the most common feature being a supportive healthcare professional allowing the couple to relate their concerns and express their goals of treatment in an unhurried manner.

General domains of the history

- Determine specifics related to ED (onset, severity, significance and situations).
- Sexual desire, relationship issues, stress at home, work.
- Genital pain or altered shape.
- Lifestyle factors: smoking, substance use/abuse.
- Co-morbid conditions: hypertension, peripheral vascular disease, diabetes, and renal disease.
- Pelvic surgery, radiation.
- Medications.
- Psychiatric illness or conditions

Questionnaires

Use of validated questionnaires may be of significant benefit. These tools can be patient self-administered and provide much of the above information in an efficient non-threatening manner. There exist a number of validated instruments designed to evaluate sexual and erectile function. The greatest utility of these questionnaires may be in establishing a response to therapy and determining overall satisfaction with drug use over a specified length of time (i.e. 4 weeks). In the attached appendix the Sexual Health Inventory for Men (SHIM) is included.

Physical exam

The consensus group found the physical to be most useful when performed in a focused manner, concentrating on the vascular and endocrine systems. A high association exists between erectile dysfunction and peripheral vascular disease and/or occult coronary syndromes. This may be an important opportunity to unmask these conditions. Assessment should include body habitus (secondary sexual characteristics), the peripheral circulation, neurological and genitourinary systems.

Identification of penile deformities may be best achieved in the erect state or by stretching the penis to make the plaque more pronounced.

Tests

Assessment for occult diabetes may be performed with a fasting glucose or HbA1c. Although recommended by the WHO consensus panel, a lipid screen is not a routine component of the Canadian ED assessment but is considered as a valuable addition to the evaluation and good general practice.

Hormonal profile screening remains a controversial aspect of the routine evaluation of ED. In the attached algorithm several suggested approaches are outlined, depicting the variety of views expressed by our consensus panel. There was a general agreement that in the man with ED and hypoactive desire, testing and treatment for low levels of testosterone is appropriate. In men with normal desire and ED the need for global testing is controversial and currently undetermined. Although beyond the scope of this document, hormonal supplementation is contraindicated in men with breast or prostate cancer. Once initiated on exogenous testosterone ongoing follow up is mandatory.

Optional testing such as TSH, LH, prolactin, CBC, and urinalysis are considered complimentary and not felt to be essential in the evaluation of ED in most cases.

Specialized testing

Psychological/psychiatric assessment. These assessments often provide important complimentary insight into relationships and situational causes to ED. The lack of widespread availability and cost limit their use in most cases of ED treatment.

NPT testing

This is a minimally invasive means to measure and record nighttime erectile events (nocturnal penile tumescence). When not present little useful information is derived. Normally, measurement of 2-5 nighttime erections persisting with significant rigidity is recorded, reassurance of a normal neurovascular axis is possible. It's greatest utility is in medico-legal cases and pharmacological studies to assess treatment impact.

Vascular testing

A variety of vascular tests exist. Historically a PBI or penile brachial index assessment was made. This noninvasive test records penile pressure as an index of arm pressure, providing a rough idea of vascular pressure into the penile circulation. The limitation was that the dorsal penile artery contributes to this index but in real life adds little to erectile function. In most research-based centers today availability of a duplex scan is common place. Use of the ultrasound scanner to localize and measure the size and flow through the cavernous vessels, pre- and post vasoactive injection allows a more refined assessment of the penile circulation. This test is currently performed less frequently in Canada since the advent of effective oral medications. Although minimally invasive the true utility of this study is present following an intracavernous injection. The logic of using an invasive test that may not alter treatment choice or management are the main reasons for this test's lack of widespread use. Recent reports have described use of sildenafil prior to scanning to help evaluate penile flow, however this approach remains experimental at present.

Another approach to evaluate the penile vascular system is the DICC (dynamic infusion cavernosometry and cavernosography). A large number of varying diagnostic protocols exist for this procedure, all aiming to define how well the penile blood-trapping mechanism (the veno-occlusive mechanism) works. In brief, dye and fluid are delivered into the penis to induce an erection. Measurement of the rise and fall of intra-penile pressure with radiologic visualization of the veins draining the penis determine if a competent or incompetent veno-occlusive mechanism exists.

The most invasive diagnostic test reserved generally for cases of high-flow priapism or planned vascular bypass is the penile angiogram. This test allows visualization of the penile circulation and directs embolization for the unusual cases of penile injury induced high-flow priapism.

Endocrinological tests

Controversy still surrounds the ideal endocrine work up for men

with ED. A morning total testosterone or bioavailable testosterone is logical in cases where sexual interest or significant reductions in ejaculate volume are aspects of the presenting complaint. Free testosterone measurement may have significant intra-assay variability which may limit it's clinical utility.

Neuro-physiological testing

This form of testing generally allows for measurement of the sacral reflex arc, an indirect measure of the perineal neural integrity. Tests to directly measure the nonadrenergic noncholinergic nervous system via biopsy or surface electrodes have proven disappointing and are not clinically useful at present.

Conclusions

1. A careful history and physical exam are the essential elements of the ED work up in most cases.
2. Basic screening tests such as serum fasting glucose and testosterone are recommended.
3. An algorithmic treatment approach using the least invasive option is suggested.
4. In some cases where greater detailed information is desired or failure of the initial oral medication is encountered, trials of more invasive second –line treatment or investigations may be appropriate.
5. Surgery should be reserved for men in whom less invasive reversible treatment has not succeeded or is contraindicated.
6. Treatment should be individualized and follow up arranged to assess efficacy of treatment.

MANAGEMENT OF ERECTILE DYSFUNCTION: APPENDIX