



PRESIDENT

Dr. Belinda Morrison

TREASURER

Dr. Gareth Reid

SECRETARY

Dr. Warren Chin

MEMBERS

Dr. Colin Abel

Dr. William Aiken

Dr. Michael Brooks

Dr. Doreen Williams

-Byfield

Dr. Mark Cadogan

Dr. Tasha Cooke

Prof. Lawson

Douglas

Dr. Leroy Harrison

Dr. Sean Jones

Dr. Richard Mayhew

Dr. Roy McGregor

Dr. Belinda

Morrison

Dr. Devon Osbourne

Dr. Hope Russell-

Dunn

Dr. Trevor Tulloch

Dr. Robert Wan

Dr. Keith

Wedderburn

Dr. Mark Young

SPONSORS

1. 21ST CENTURY ONCOLOGY
2. AA LAQUIS LTD
3. ALLIED UROLOGICAL SERVICES, LLC
4. ANDAR
5. ASTRA-ZENECA
6. ELITE DIAGNOSTIC IMAGING SERVICES
7. FERRING PHARMACEUTICALS
8. GLAXOSMITHKLINE CARIBBEAN LTD
9. INTAS PHARMACEUTICALS LTD
10. JANSSEN
11. PFIZER
12. UNIVERSITY OF MIAMI



JAMAICA UROLOGICAL SOCIETY

Annual Symposium

Jamaica Conference Centre

14 - 20 Port Royal Street, Kingston

Sunday, March 5, 2017

8:00 am - 3:30 pm



Secretary's Message



The Jamaica Urological Society (JUS) represents all of the surgeons with specialty urological training in Jamaica. Since its inception in 1993, the JUS has sought to meet the urological care needs of the island's population of just over 2.8 million.

Our task extends far beyond seeing and treating patients when they are ill. We are also involved in screening patients for prostate cancer, the most common malignancy in Jamaican males, along with various public education campaigns. Our profession is one that survives on mentorship, and as such we strive to maintain a vibrant residency program that offers contemporary training at an international standard without losing sight of our local reality.

As Jamaica's population ages, the demand for urological care will increase. Our existing cadre of just over 20 members represents less than 50% of the population coverage recommended by first world urological associations. Despite this relative shortage, our members continue to advance Urology in Jamaica by providing standard of care treatment to our patients.

There is always room for improvement, and the JUS remains committed to highlighting these areas and addressing them for the future. The program for this year's annual symposium highlights a topic considered taboo for Jamaican men, that of male infertility. It also highlights areas of advancement in urology that require integration into our local practice.

On behalf of the executive, I would like to thank our sponsors for their continued support and our members/ colleagues for their tireless efforts in serving our beloved specialty.

Regards,
Dr Warren Chin
Secretary
Jamaica Urological Society

The President's Message



It is my great pleasure to welcome everyone to the Jamaica Urological Society's Annual Symposium. The JUS has hosted an annual symposium since its inception in 1993 and has provided a platform for the discussion of common and major urological issues affecting Jamaica and the Caribbean region. These discussions, we hope, have helped to shape policy decisions in our region. The Symposium has always boasted a wide array of local, regional and international experts in the field who stimulate thought-provoking discussions and present state of the art lectures.

We are very pleased that this year the focus of the symposium will be on 'Male Infertility'. The theme is a common condition managed by local urologists, however not often given consideration in academic discussions. We are pleased to have international fertility management experts such as Prof. Edmund Sabanegh from the Cleveland Clinic as well as Prof. Edson Borges from Brazil. We are also honored to have local and regional speakers who will speak on the local experience with male infertility assessment and management. Our Symposium will also include lectures on other topics such as prostate cancer, urinary tract stones and BPH.

The JUS is committed to providing the highest level of urological care in the island. The society is also committed to continuing medical education, targeting physicians, residents and medical students. We are aware that the conference will not be a success without our dedicated speakers and attendees. We are grateful for our sponsors and invite attendees to interact with sponsors at the booths during the day. I thank you for attending the conference and wish that the day provides a stimulating academic environment which may improve clinical care.

Regards,
Dr. Belinda F Morrison
President
Jamaica Urological Society

**First Scientific Session:
Male Fertility
Chairperson: Dr. Michael Brooks**

- 8:30 am -8:45 am: Welcome and Introduction-
Dr. Belinda Morrison, President, JUS
- 8:45 am - 9:05 am: Evaluation of sexual and fertility dysfunction in spinal
cord injured men in Jamaica-
Dr Rory Dixon, Sir John Golding Rehabilitation Centre,
Kingston, Jamaica
- 9:05 am - 9:25am: Case Report and review of the literature- Infertility and
the young male with prostate cancer-
Dr Davon Mitchell, University of the West Indies
- 9:25 am - 9:50 am: Sickle cell disease and male infertility-
Dr Belinda Morrison, University of the West Indies,
Kingston, Jamaica
- 9:50 am -10:20 am: Fertility- a window on a man's health -
Prof Edmund Sabanegh, Cleveland Clinic, USA
- 10:20 am - 11:00 am: **COFFEE BREAK**
- 11:00 am - 11:20 am: Impact of advanced male age on outcome of ART at the
Hugh Wynter Fertility Treatment Unit-
Dr Loxley Christie, University of the West Indies,
Kingston, Jamaica
- 11:20 am - 11:35 am: History of male fertility enhancing drugs-
Medical Student, Mr. Marvin Groves
- 11:35 pm - 12:05 pm: Testosterone therapy and male infertility-
Dr Maliza Persaud, San Fernando Teaching Hospital,
Trinidad and Tobago
- 12:05pm - 12:30pm ASK THE EXPERTS

LUNCH

**Stereotactic Body Radiation Therapy (SBRT) for Low-Risk Prostate Cancer:
A Single Center's Experience**
Sophia Edwards-Bennett MD PhD, Barbara Roe MS, Patrick Francke MD and Stephen Andrews DO.

21st Century Oncology

A study evaluating the treatment of low-risk prostate cancer patients with SBRT (Stereotactic Body Radiation Therapy) was conducted at Carolina Regional Cancer Center; as a subset of a larger multi-center investigation at 21st Century Oncology.

Herein, we report our preliminary data on treatment outcomes, clinical local and distant failure, overall survival, and genitourinary and rectal toxicities.

In addition, we will briefly explore the radiotherapeutic procedures and techniques applied in the setting of spinal osseous oligometastases in select stage IV prostate cancer patients.

Benign Prostatic Hyperplasia and Erectile Dysfunction

Michael Brooks DM (Urol)

Kingston Public Hospital, Jamaica

Benign Prostatic Hyperplasia (BPH) and Erectile Dysfunction (ED) are both common pathologies and are seen with increasing frequency as men age. They both, therefore, constitute, major health issues as they significantly impair the quality of life in the ageing man. These pathologies can both be effectively managed with pharmacological agents and have, in general, been treated as separate pathologies when they co-exist.

Recent data suggest that lower urinary tract symptoms (LUTS) secondary to BPH and ED may share common pathogenetic mechanisms. These data have had a significant impact on the way these disorders are viewed and treated.

This discussion will look at the common underlying mechanisms of BPH and ED as well as explore the new data surrounding the treatment of these common urological pathologies.

Shockwave lithotripsy: outcomes, complications, and observations

Jon Owen Marks MD

Allied Urological Services

Since its introduction in 1981, Extracorporeal shockwave lithotripsy (ESWL) has become a standard part of the urological armamentarium for treating renal lithiasis, often limited only by machine availability. Patient preference for minimally invasive treatment, an expanded range of indications (ureteral stones, children, stones larger than 1 cm, solitary kidneys) and evolution in machine design have contributed to its durability even in the face of competing modalities such as ureteroscopy and percutaneous nephrolithotomy. In the United States, physician group ownership of machines leased to hospitals provided an additional impetus to the proliferation and availability of this technology. The original article by Christian Chaussy published in the Journal of Urology in 1981 was only 4 pages long, but as editorialized by Manoj Monga in the '100 Years' supplement to the Journal this year, the impact on the practice of urology was profound. Over the years, the nuances of treatment protocols, the range of contraindications, and the means of optimizing results have added to our understanding of shockwave lithotripsy's continued role.

Sperm Abnormalities in Males Seeking Assisted Reproductive Techniques

Denise Everett Keene MSc, BSc

Senior Embryologist, The Hugh Wynter Fertility Management Unit, The University of the West Indies, Mona

The World Health Organization (WHO) most recent reference values published in 2010 have changed considerably from the initial reference values of 1980. The Hugh Wynter Fertility Management Unit (HWFMU) utilizes the 2010 WHO reference values in their Semen Analysis (SA) reporting.

Looking at the most recent data of 2016 we can see that of the 192 SA, 50% were found to have at least one abnormal value, the largest diagnosis being Oligospermia (31%).

The SA report, along with the standard female investigations is used to guide couples towards appropriate Assisted Reproduction Techniques at the only facility on the island. Commonly, for sperm abnormalities the micro manipulative technique of IntraCyttoplasmic Sperm Injection (ICSI) is used to ensure fertilization. In 2016, a total of 109 egg collections were performed and 41% used ICSI (with the Oligospermics making up the largest group). There were 26% that were able to freeze resultant embryos and a further 69% that had an Embryo Transfers (ET). Resulting in a 32% pregnancy rate per ET of which the most successful group being Oligoasthenospermics.

MRI-ULTRASOUND GUIDED FUSION PROSTATE BIOPSY FOR PROSTATE CANCER DETECTION

Chad Ritch MD

University of Miami Leonard M Miller School of Medicine, Miami, FL, USA

Utilization of prostate MRI for prostate cancer detection has increased significantly over the past 4 years. Studies demonstrate that multiparametric MRI (mp MRI) can be used to identify suspicious lesions in the prostate. New technology is available that allows for fusion of these mp MRI images with real-time ultrasound images in order to target these lesions during prostate biopsy (MR/US fusion biopsy). MR/US fusion biopsy has been shown to have higher detection rate for clinically significant prostate cancer compared to standard 12-core systematic biopsy. This presentation will describe the indications for MR/US fusion biopsy, as well as, provide a case-based overview of its use in clinical practice.

Multiparametric MRI of the prostate - the Jamaican experience

Sundeep Shah - Radiologist

Multiparametric MRI has been touted as a method for not only determining clinically significant cancers but also for guiding biopsies. Despite the recent increase in the number of MRI scanners available throughout Jamaica, technical issues regarding performing and interpreting of mpMRI are one of the major drawbacks to its widespread use both locally and overseas.

The performance of mpMRI, its challenges and current local experience in Jamaica will be discussed.

Second Scientific Session: Male Infertility and Prostate Cancer Chairperson: Dr. Leroy Harrison

- 1:30 pm - 2:00 pm: Vasectomy reversal in 2017- Prof Edmund Sabanegh, Cleveland Clinic
- 2:00 pm - 2:15 pm: Semen abnormalities in males seeking ART at the Hugh Wynter Fertility Unit- Mrs. Denise Everett Keene- Embryologist, Hugh Wynter Fertility Unit
- 2:15 pm - 2:30 pm: MRI- ultrasound-guided fusion biopsy for prostate cancer detection- Dr Chad Ritch, University of Miami, USA
- 2:30 pm - 2:45 pm: Multi-parametric MRI in prostate cancer: The radiologist's perspective- Dr Sundeep Shah, University Hospital of the West Indies, Kingston, Jamaica
- 2:45 pm - 3:00 pm: Stereotactic Body Radiation Therapy (SBRT) for Low-Risk Prostate Cancer: A Single Center's Experience- Dr. Sophia Edwards Bennett, 21st Century Oncology, USA
- 3:00 pm - 3:15 pm: BPH and ED in Jamaican Men- Dr Michael Brooks, Immediate Past President, JUS
- 3:15 pm - 3:30pm: Shockwave lithotripsy: outcomes, complications, and Observations
Dr Jon Owen Marks, Allied Urology
- 3:30pm: Closing Remarks and Vote of Thanks

ABSTRACTS

Evaluation of sexual and fertility dysfunction in spinal cord injured men in Jamaica

Rory Dixon DM (Orthopaedics)

Sir John Golding Rehabilitation Centre, Kingston, Jamaica

Objectives: The objective of this study was to determine the prevalence of sexual dysfunction and infertility in males with traumatic spinal cord injuries (SCI) managed in Jamaica, as well as the therapeutic options offered.

Settings: Single SCI rehabilitation center in Jamaica.

Methods: A cross-sectional study including males with traumatic SCI managed at the Sir John Golding Rehabilitation Centre, Kingston, Jamaica was done between January 1 and December 31, 2015. Sexual function was measured with the International Index of Erectile Function Questionnaire (IIEF) and further information on social history, fertility desires, treatment options offered were collected. Data were analyzed using Stata 12 for Windows (College Station, USA).

Results: The mean age of patients at the time of study was 38.8 ± 15.3 years (Range 19-71) with a mean duration of injury of 3.7 ± 2.4 years (Range 1.3-15.6). Of 45 patients with traumatic SCI surveyed, 90.7% had erectile dysfunction, with 62.8% being classified as severe and 73.3% of men were unable to ejaculate. Treatment for erectile and ejaculatory dysfunction was offered in only 2 patients, respectively. Most (71.1%) patients indicated that they wanted to have children in the future, however no one had been referred for assisted reproductive techniques.

Conclusion: Men with traumatic SCI have high rates of severe erectile and ejaculatory dysfunction, but have preserved interests in maintaining fertility. Guidelines for sexual education for men with traumatic SCI in Jamaica and the Caribbean are needed.

Fertility and the young male diagnosed with prostate cancer

Davon Mitchell MBBS

University of the West Indies, Mona, Jamaica

With the use of prostate specific antigen (PSA) for screening, younger men are being diagnosed with prostate cancer. Some of these men may be desirous of fathering children after treatment.

The treatment options available to men for prostate cancer, excluding watchful waiting and active surveillance, may affect fertility potential. Radical prostatectomy is associated with an ejaculation and the possibility of impotence; radiation therapy, hormonal ablation and chemotherapy may affect spermatogenesis.

The options available to maintain fertility in these men are sperm cryopreservation prior to treatment or sperm extraction from the epididymis or testis after treatment.

We review the case of one patient diagnosed and treated for prostate cancer, who was desirous of conceiving a child, as well as the literature as it pertains to infertility and the young male with prostate cancer.

Testosterone therapy and male infertility

M. Persaud*, C. Goetz, T. Goetz, G. Richardson, L. Goetz

San Fernando Teaching Hospital, University of the West Indies, St. Augustine Campus, Trinidad and Tobago

Testosterone preparations are being marketed in Trinidad and Tobago for the treatment of low sperm counts.

A retrospective chart review was done over an 18-year period of patients presenting to a single urologist for treatment of infertility. A total of 473 patients were identified with 81% file retrieval. Demographic information, pre-treatment testosterone levels and sperm counts were recorded. Female factor contribution to infertility was also documented.

13.5% of patients were being treated with testosterone to improve fertility, with about 75% of patients sourcing treatment from gynaecologists. The average age of the patients was 32 years with a 2:1 ratio of Indo-Trinidadians to Afro-Trinidadians. All patients had normal pre-treatment serum testosterone levels. More than 90% of patients experienced a decrease in sperm count from their baseline at presentation.

Testosterone therapy is contraindicated in the treatment of male infertility but it demonstrates potential as a male contraceptive in the future.

Vasectomy Reversal in 2017

Edmund Sabanegh, Jr. MD

Cleveland Clinic, USA

Microsurgical reconstruction of the male genital tract has dramatically improved over the past 100 years, and today is one of the most successful therapies for the management of male infertility. Over 5% of patients with primary infertility will have intentional ductal obstruction from a vasectomy, which is potentially correctible with surgical reconstruction. Many men will eventually request a restoration of fertility because of changing life circumstances such as remarriage, change in family goals, or death of a child.

Recognition of ductal obstruction has long fueled an interest in innovative approaches to restore genital tract patency. In 1903, Martin first reported a technique to treat epididymal obstruction by anastomosing the vas to the epididymis in a side-to-side fashion with fine silver wire. This technique remained the standard for nearly 75 years, until advances in technique and instrumentation made direct, single-tubule anastomosis feasible. In a similar fashion, Quinby performed the first reportedly successful vasectomy reversal in 1919 using a strand of silkworm gut as a stent.

These pioneers and others provided the basis from which the innovations of today have grown. In this talk, we will review the incremental improvements in surgical decision making and technique followed by careful critical analysis of results to support these refinements.

The Impact of Advanced Paternal age on the Success of Assisted Reproductive Techniques

Loxley R Christie DM (OBGyn)

University of the West Indies, Mona, Jamaica

Internationally, as a consequence of social changes and advanced health care, the average paternal age is increasing; Jamaica is not immune to these changes. This trend results in many couples with men of advanced paternal age seeking assisted conception.

The impact of advanced maternal age on pregnancy outcome is clearly defined for spontaneous and assisted conception. Paternal age was long almost ignored in studies of age effect on reproductive outcomes and as such the impact of advanced paternal age is far less clear. Although some early studies have suggested that up to their seventh decade, age has no deleterious effects on a sperm's ability to fertilize egg, there is much controversy recently as to how immune males' reproductive potential is to the ageing process.

Some recent studies, controlling for a number of confounding variables, have shown that increasing paternal age can be accompanied by greater risk of delay in achieving pregnancy, a decrease in IVF/ICSI success rate, miscarriage, preterm birth, and late foetal death as possible unfavourable pregnancy outcomes. Reports of increased incidences of different types of disorders like autism, schizophrenia, bipolar disorders, and childhood leukaemia in the offspring of advanced age males are also longer term concerns to any parent, much less those who financial and emotional journey to parenthood is heavily skewed.

The results and local experience of Jamaican couples must be carefully reviewed as this will impact on how these couples are to be counselled before during and after treatment.

History of male fertility enhancing drugs

Marvin Groves Medical Student

University of the West Indies, Mona, Jamaica

Jamaicans have been noted to extensively use herbal and alternative preparations for minor and major health problems (David Picking et al. 2011), and research is increasingly being done globally on such preparations. Though research is being done there are still plethora of data either unexplored or underutilized. Male infertility is a pertinent issue in Jamaica socially and medically, as such, delving into the application of alternative medicine to treat it is a viable research avenue. Various journals were reviewed by using Google scholar and pubmed searches for the key-phases; male, infertility, Jamaica and herbal or alternative preparations. The data gathered was compiled then analyzed. Three articles supported the use of Traditional Chinese medicine in the form of acupuncture as adjunct with in vitro fertilization, while others support herbal supplements. More research can be done on each herb, supplement or technique to be able to advocate for the implementation of these methods.

Sickle Cell Disease and male infertility

Belinda F Morrison DM (Urology)

University of the West Indies, Mona, Jamaica

Sperm density, motility and morphology are all abnormal in men with sickle cell disease. Osegbe and Akinyanju reported that 100% of patients studied with sickle cell disease had abnormal semen parameters.

Spermatogenic defects that occur with sickle cell disease are worsened by hydroxyurea, a disease-modifying drug commonly used for treatment. The effects are seen as early as 6 months after treatment and are not reversible. It is recommended that before treatment with hydroxyurea, patients receive a semen analysis and consider sperm cryopreservation particularly among those desirous of future fertility.

Testosterone replacement therapy also impairs sperm number and function and patients considering this treatment should be advised of this.

Fertility- a window on a man's health

Edmund Sabanegh, Jr. MD

Cleveland Clinic, USA

Despite advances in the diagnosis and treatment of male subfertility, up to 50% of men will have no clear etiology for fertility impairment. Emerging studies suggest that male subfertility is associated with a variety of significant, occult, underlying pathologies for the male to include endocrinopathies, genetic disorders, neoplasms, and mental health disease to name a view. Lifestyle choices and nutritional status are also associated with subfertility and may impact the male's longevity.

In this presentation, we will review the existing data linking reduced fertility to serious medical pathology. Emphasis will be placed on helping clinicians identify men at increased risk with targeted screening and treatment recommendations. In addition, we will discuss current studies related to offspring health from sub-fertile men.

SPONSORS

