

## Master Lecture No. 8

# Post-Orgasmic Illness Syndrome

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Chris G McMahon MBBS FACHSHM  
Australian Centre for Sexual Health





# Prof Marcel Waldinger

Division Pharmacology  
Depart. Pharmaceutical Sciences  
University of Utrecht, The Netherlands

Practice of Neurosexology  
Amstelveen, The Netherlands

## **Post-Orgasm Illness Syndrome**

or **POIS** is a post-ejaculation complex of local and systemic symptoms, which occur within sec/min/hours after ejaculation



# POIS is a Rare Disease ...

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- A **rare disease**, also referred to as an **orphan disease**, is any disease that affects a small percentage of the population
- Most rare diseases are genetic, and thus are present throughout the person's entire life, even if symptoms do not immediately appear
- Many rare diseases appear early in life, and about 30 percent of children with rare diseases will die before reaching their fifth birthday
- No consensus regarding what prevalence defines a disease as rare

# Defining a rare disease ...

- The **US Rare Diseases Act of 2002** defines rare disease strictly according to prevalence
  - *"any disease or condition that affects < 200,000 people in the United States,"* or about **1 in 1,500** people
- In **Japan**, the legal definition of a rare disease is one that affects <50,000 patients in Japan, or about **1 in 2,500** people
- However, the **European Commission on Public Health** defines rare diseases as *"life-threatening, chronically debilitating diseases which are of such low prevalence that special combined efforts are needed to address them"*
  - The term low prevalence is later defined as generally meaning fewer than **1 in 2,000** people
  - Diseases that are statistically rare, chronically debilitating, or inadequately treated but not life-threatening are excluded from their definition

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### NIH names new clinical sites in Undiagnosed Diseases Network

Four-year, \$43 million initiative engages broad expertise in study of mystery conditions ...

[Read more...](#)[1](#) [2](#) [3](#) [4](#) [5](#)

### Genetic and Rare Diseases (GARD) Information Center

 [Enfermedades en español](#)

#### Browse Diseases

A	B	C	D	E	F	G	H	I	J	K	L	M
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
0-9												

View:

#### Diseases by Category

[Rare Diseases with FDA-Approved Medical Products](#)

### About ORDR

ORDR is part of the [National Center for Advancing Translational Sciences \(NCATS\)](#).

The goals of ORDR are to identify, stimulate, coordinate and support research to respond to the needs of patients who have any one of the approximately 6,800 rare diseases known today. [Read more about ORDR](#).

### Upcoming Conferences

#### [2014 International Pathogenic Neisseria Conference](#)

Sunday, October 12, 2014 - Friday,  
October 17, 2014  
Asheville, NC

[MORE CONFERENCES](#) ▶

### Research



#### ORDR Programs

ORDR coordinates the following collaborative research efforts

- [Bench-to-Bedside Awards](#)
- [The Rare Diseases Clinical Research Network](#)
- [Global Rare Diseases Patient Registry and Data Repository \(GRDR\)](#)
- [Rare Diseases Human Biospecimens/Biorepositories \(RD-HuB\)](#)
- [Undiagnosed Diseases Program](#)



#### Research Funding Resources

Funding opportunities from the NIH and other sources

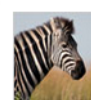


#### Tools for Researchers

Resources to aid in research efforts

### Resources

#### Featured Guide

[How to Find a Disease Specialist](#)[MORE GUIDES](#) ▶

#### Rare Diseases Resources

A collection of resources for the rare disease community



#### Genetics Resources

A collection of resources that provide information on genes, genomics, and genetic conditions



#### Genetic Testing and Treatment

Learn about genetic testing and finding healthcare services



#### Support for Patients and Families

Organizations that can help you find support and assistance



National Center  
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## DISEASES

*Genetic and Rare Diseases Information Center (GARD)* [Print friendly version](#)

### Post orgasmic illness syndrome

#### Overview

[Healthcare Services](#)[Conferences](#)[Organizations](#)[Research](#)[Your Questions Answered](#)

#### Other Names for this Disease

- POIS
- Post orgasmic sick syndrome

See [Disclaimer](#) regarding information on this site. Some links on this page may take you to organizations outside of the National Institutes of Health.

#### OVERVIEW

These Web pages are updated as the Genetic and Rare Diseases Information Center receives questions and as new information becomes available. If you don't see many information resources on this page, it may be because the Information Center hasn't yet received a question about this condition.



#### Your Questions Answered

by the Genetic and Rare Diseases Information Center

Please [contact us with your questions](#) about **Post orgasmic illness syndrome**. We will answer your question and update these pages with new resources and information.

#### On this page

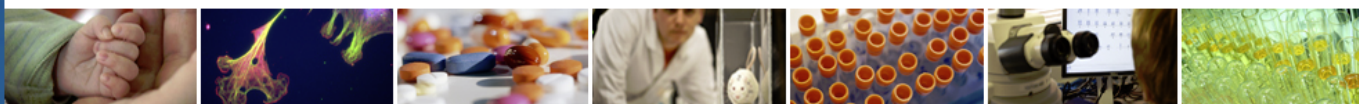
- [In Depth Information](#)

#### In Depth Information

- [Orphanet](#) is a European reference portal for information on rare diseases and orphan drugs. Access to this database is free of charge.
- [PubMed](#) is a searchable database of medical literature and lists journal articles that discuss Post orgasmic illness syndrome. Click on the link to view a sample search on this topic.

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*Rare diseases are **rare**, but  
rare disease patients are **numerous***



## Access our Services

pois

OK

Inventory, classification and encyclopaedia of rare diseases, with genes involved

Assistance-to-diagnosis tool

Emergency guidelines

Inventory of orphan drugs

Directory of medical laboratories providing diagnostic tests

Directory of expert centres

Directory of ongoing research projects, clinical trials, registries and biobanks

Directory of patient organisations

Directory of professionals and institutions

Newsletter

Collection of thematic reports: Orphanet Reports Series

## Read Orphanet reports

List of rare diseases

Prevalence of Rare Diseases

Disease registries in Europe

Lists of medicinal products

Orphanet Activity Reports

Satisfaction Surveys

## Contribute to Orphanet

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## Download Orphanet data

Orphadata

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Armenia

Australia

Austria

Belgium

Bulgaria

Canada

Croatia

Cyprus

Czech Republic

Denmark

Estonia

Finland

France

Georgia

Germany

Greece

Hungary

Ireland

Israel

Italy

Latvia

Lebanon

Lithuania

Luxembourg

Morocco

Netherlands

Norway

Poland

Portugal

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Serbia

Slovakia

Slovenia

Spain

Sweden

Switzerland

Turkey

United Kingdom

## Newsletter

Read the last newsletter

Read previous issues

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## Other documents

Council Recommendation on an action in the field of rare diseases

State of Art of rare diseases

## Other rare diseases websites

Rare Diseases - European Commission

EUCERD Joint Action

European Medicines Agency

IRDiRC

Office of rare diseases research (US)

EC Expert Group on Rare Diseases (EU)

## Events

[See all](#)

SEPT  
22

XVème forum des associations - internet des objets, applications mobiles : des révolutions NTIC pour les maladies rares

22 September, 2014, Paris, France

SEPT  
25

9th International Research Symposium on Marfan Syndrome and related disorders

25-27 September, 2014, Paris, France

OCT  
7

ICORD 2014 Annual Meeting: Societal value of Prevention, Diagnosis and Treatment of Rare Diseases

7-9 October, 2014, Ede, The Netherlands

OCT  
18

64th Annual Meeting of the American Society of Human Genetics: ASHG 2014

18-22 October, 2014, San Diego, US



## SIMPLE SEARCH

(\*) mandatory field

- ☒ Disease name
- ☐ Gene name or symbol
- ☐ OMIM
- ☐ ICD-10
- ☐ Orpha number

→ OK

## OTHER SEARCH OPTION(S)

> Alphabetical list

## :: Postorgasmic illness syndrome

Orpha number	:	ORPHA279947	ICD-10	:	-
Synonym(s)	:	POIS	ICD-O	:	-
Prevalence	:	<1 / 1 000 000	OMIM	:	-
Inheritance	:	Not applicable	UMLS	:	-
Age of onset	:	Adult	MeSH	:	-
		Adolescent	MedDRA	:	-
			SNOMED CT	:	-

### SUMMARY

An Orphanet summary for this disease is currently under development. However, other data related to the disease are accessible from the Additional Information menu located on the right side of this page.

[Suggest an update](#)



### Additional information

#### Further information on this disease

- > Classification(s) (1)
- > Gene(s) (0)
- > Other website(s) (0)

#### Health care resources for this disease

- > Expert centres (5)
- > Diagnostic tests (0)
- > Patient organisations (0)
- > Orphan drug(s) (0)

#### Research activities on this disease

- > Research projects (0)
- > Clinical trials (0)
- > Registries/biobanks (0)
- > Networks (0)

#### Orphanet Reports series

- > Prevalence
- > Orphan drugs in Europe

#### Getting involved /informed

- > Read the newsletter
- > Read OJRD [->]
- > Register your activity

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Alone we are rare. Together we are strong.™

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## Your Voice on Capitol Hill



### Promoting progress for all through 21st Century Cures

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1 2 3 4

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#### New Rare Disease Education for Healthcare Professionals Partnership

NORD and Frontline Medical Communications have announced a strategic alliance to increase awareness and understanding of rare diseases. [Read the press release >](#)



#### Tell Senate to Pass Newborn Screening Reauthorization Act

Join NORD in supporting this important March of Dimes campaign. [More >](#)



#### NORD President's Letter is Published in The New Yorker

Read a letter from Peter L. Saltonstall regarding a recent article on a family's incredible journey seeking a diagnosis. [More >](#)



#### NORD Publishes Physician Guide to HoFH

The latest in NORD's collection of guides for physicians is on rare disease that can lead to heart attack in children and young adults. [More >](#)

[More news >](#)

#### WHAT IS NORD?

The National Organization for Rare Disorders (NORD) provides advocacy, education and other services to improve the lives of all people affected by rare diseases. [More >](#)

#### I WANT TO:

[Find a patient organization >](#)

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#### The RARE DISEASE DATABASE

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Rare Disease Resource for Medical Professionals



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## RECENT GRANT RECIPIENTS

Recipients of research grants from NORD

Rare disease research is rarely a priority, and the NORD Research Grant Program exists to encourage the study of diseases for which there may be few or no other sources of funding. Recent recipients of NORD research grants are listed below.

Two previous award recipients have recently had the manuscripts of the NORD-funded studies published. Read the studies from the [European Journal of Haematology](#) and [Nature Medicine](#).

**View the Recipients from:**

2013

### NORD 2013 GRANT RECIPIENTS

NORD's Medical Advisory Committee has recommended, and the NORD Board of Directors has approved, the awarding of nine research grants in December 2013. The patient organizations that funded the grants (when applicable), investigators, their institutions, and their projects are as follows:

#### **Post-Organic Illness Syndrome (POIS)**

(Funded by the patient group, the [POIS](#) Forum)

**Barry R. Komisaruk, Ph.D.**

Rutgers University

*Is [POIS](#) a case of Vagal Dystonia?: An fMRI Brain Activity Analysis*

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**HAVE A QUESTION?**

Our Patient Info Team is here for you!



**TOGETHER WE ARE STRONG**

Join us in creating awareness for Rare Disease Day.



# People Engage in Sexual Activity for a Number of Reasons

- Feelings of calmness, contentment, and sedation after orgasm, particularly in men, have been described as inducements for intercourse [1-4]
- In 2002, Waldinger et al. [5] described a collection of symptoms following orgasm in two males that were qualitatively similar but more extreme and prolonged than the expected state of relaxation and somnolence that would normally occur

1. Meston CM, Buss DM. Why humans have sex. Arch Sex Behav 2007;36:477–507.
2. Leigh BC. Reasons for having and avoiding sex: Gender, sexual orientation, and relationship to sexual behaviour. J Sex Res 1989;26:199–209.
3. Hawton K. Sex therapy a practical guide. Oxford: Oxford Medical Publications; 1985:14–5.
4. Masters W, Johnson V, Kolodny R. Heterosexuality. New York: Harper Collins; 1994:41–72
5. Waldinger MD, Schweitzer DH. Postorgasmic illness syndrome: Two cases. J Sex Marital Ther 2002;28:251–5.



# Post-orgasmic Illness Syndrome (POIS)

- Symptoms consisted of severe myalgia and fatigue associated with a flu-like state following orgasm
- Symptoms last for 2-7 days and had been present since puberty
- The symptoms were severe enough that the individuals avoided ejaculating to try to prevent the symptoms
- Waldinger et al named this cluster of symptoms following ejaculation as post-orgasmic illness syndrome (POIS)
- To date, POIS is a rarely described syndrome, and despite having a significant impact on quality of life for individual sufferers, little is known about its epidemiology and etiology

# Is POIS an Orphan Disease or may it be more common than reported in the literature?

- In the *New York Times* in January 2009, Richard Friedman, a NYC psychiatrist describes several patients who experience low mood and somatic symptoms following orgasm, whose symptoms improved with the use of SSRIs
- Evidence of many more undiagnosed sufferers of POIS is seen in the existence of an extremely active Internet forum where more than 100 people have self-reported symptoms of POIS

## The New York Times

### Sex and Depression: In the Brain, if Not the Mind

By RICHARD A. FRIEDMAN, M.D.  
Published: January 19, 2009

As everyone knows, sex feels good.

[Enlarge This Image](#)



David Suter

Or does it? In recent years, I've come across several patients for whom sex is not just unpleasurable; it actually seems to cause harm.

One patient, a young man in his mid-20s, described it this way: "After sex, I feel literally achy and depressed for about a day."

Otherwise, he had a clean bill of health, both medical and psychiatric: well adjusted, hard-working, lots of friends and a close-knit family.

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**Enough Said**  
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# Postorgasmic Illness Syndrome (POIS) in 45 Dutch Caucasian Males: Clinical Characteristics and Evidence for an Immunogenic Pathogenesis (Part 1)

Marcel D. Waldinger, MD, PhD,<sup>\*†</sup> Marcus M.H.M. Meinardi, MD, PhD,<sup>‡</sup> Aeilko H. Zwinderman, PhD,<sup>§</sup> and Dave H. Schweitzer, MD, PhD<sup>¶</sup>

- 45 males with suspected POIS
- Symptoms did not occur during sexual contact without ejaculation
- In 87% of men, POIS symptoms started within 30 minutes after ejaculation
- All men reported a gradual intensity peak of symptoms, most of which were experienced on day 2

**Table 2** Characteristics of postorgasmic illness syndrome (POIS)

	Mean ± SD
POIS	
Age of onset	26 ± 13 years
Duration of complaints	4.6 ± 2.8 days
Time of onset POIS after ejaculation	64 ± 219 minutes
Time of onset POIS after ejaculation	N (%)
<30 minutes	39 (87)
30–60 minutes	1 (2)
60–180 minutes	1 (2)
180–240 minutes	3 (7)
1,440 minutes	1 (2)

Waldinger, M.D., et al., Postorgasmic Illness Syndrome (POIS) in 45 Dutch caucasian males: clinical characteristics and evidence for an immunogenic pathogenesis (Part 1). J Sex Med, 2011. 8(4): p. 1164-70.

# Complaints Of POIS Were Categorized in Seven Clusters Of Symptoms

**Table 4** Categorization of POIS complaints

Clusters	Complaints	Freq.	%
General	Extreme fatigue/exhausted	36	80
	Palpitations	10	22
	Problems finding words/incoherent speech/dysarthria	8	18
	Concentration difficulties	39	87
	Quickly irritated	35	78
	Can not stand noise/light/photophobia	4	9
	Depressed mood	7	15
Flu-like	Feverish/extreme warmth/perspiration/shivery	35	78
Head	Ill with flu/feeling sick/feeling cold	21	47
	Headache/pressure/heavy/woolly/swollen/cotton wool/full feeling/foggy feeling in the head	25	55
Eyes	Burning/red injected eyes	20	44
	Blurred vision	10	22
	Watery/irritating/running/itching eyes	12	27
	Dry/sensitive/painful eyes/pressure on eyes	9	20
Nose	Congestion nose	14	31
	Watery/snotty/runny nose/sneezing	15	33
Throat	Dirty taste in mouth/dry mouth	5	11
Muscles	Tickling cough/hoarse voice/sore throat	5	11
	Muscle tension in back/neck	11	24
	Muscle weakness/feeling tired muscles/flabby legs	8	18
	Leg pain/muscle pain/heavy legs	14	31
	Tension/heavy feeling/stiffness muscles	10	22



## 5 Preliminary Criteria for POIS

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1. One or more of the following symptoms: sensation of a **flu-like state, extreme fatigue or exhaustion**, weakness of musculature, experiences of **feverishness or perspiration, mood disturbances and/or irritability**, memory difficulties, concentration problems, incoherent speech, **congestion of nose or watery nose, itching eyes**
2. All symptoms **occur immediately (e.g., seconds), soon (e.g., minutes), or within a few hours after ejaculation** that is initiated by coitus, and/or masturbation, and/or spontaneously (e.g., during sleep)
3. **Symptoms occur always or nearly always**, e.g., in more than 90% of ejaculation events
4. Most of these symptoms **last for about 2 to 7 days**
5. **Disappear spontaneously.**

# Postorgasmic Illness Syndrome (POIS) in 45 Dutch Caucasian Males: Clinical Characteristics and Evidence for an Immunogenic Pathogenesis (Part 1)

Marcel D. Waldinger, MD, PhD,<sup>\*†</sup> Marcus M.H.M. Meinardi, MD, PhD,<sup>‡</sup> Aeilko H. Zwinderman, PhD,<sup>§</sup> and Dave H. Schweitzer, MD, PhD<sup>¶</sup>

- Proposed an immunogenic mechanism
- Local allergic reactions of eyes and nose were reported in 44% and 33% of subjects
- 58% had an atopic constitution
- 88% men had a positive skin-prick test with their own semen

# Skin-Prick Test

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- Defrost of frozen semen / diluted with 0.9% NaCl (saline) to a concentration of 1 : 40,000
- Intracutaneous injection of 0.05 ml of the diluted auto-semen in left forearm
- Response was compared to intracutaneous injection of 0.05 ml of 0.9% NaCl in left forearm
- Skin reaction interpretation at 15 minutes
- Skin reaction measured according to a standardised protocol

# Skin Reaction Grading System

- neg. = wheal and erythema < 5 mm
- 1+ = wheal 5-10 mm and erythema of 11-20 mm
- 2+ = wheal and erythema of 21-30 mm
- 3+ = erythema of 31-40 mm
- 4+ = wheal > 15 mm or erythema > 40 mm

# Skin Prick Test with Autologous Semen

- N=45
- 33 (73%) consented in a skin-prick test with their own diluted semen
- Semen
  - Test pos. in 29/33 (88%) males – grade 2+ to grade 4+
  - Test neg. in 4/33 (12%) males
- Saline
  - Test neg., In 33/33 (100%) - wheal max 2 mm

# Patients Forearm Before Skin Prick

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# Single Blind Skin Prick

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# Positive Skin Reaction 5 min After Skin Prick: Severity Mild

Placebo

Diluted Semen





# Patient Characteristics

	Mean $\pm$ SD yr
<b>Age patient</b>	<b>43 <math>\pm</math> 13</b>
<b>Age partner</b>	<b>42 <math>\pm</math> 11</b>
<u>Marital Status</u>	<u>N (%)</u>
<b>Married</b>	<b>20 (44)</b>
<b>Partner living together</b>	<b>6 (13)</b>
<b>Partner not-living together</b>	<b>7 (16)</b>
<b>Divorced</b>	<b>3 ( 7)</b>
<b>Single</b>	<b>9 (20)</b>
<u>Duration Relationship</u>	<u>Mean <math>\pm</math> SD yr</u>
<b>Married</b>	<b>18.8 (11.3)</b>
<b>Partner living together</b>	<b>4.2 ( 2.9)</b>
<b>Partner not-living together</b>	<b>6.6 ( 8.4)</b>

# Age Distribution

Age	N
20-29 year	8
30-39 year	9
<b>40-49 year</b>	<b>11</b>
<b>50-59 year</b>	<b>13</b>
60-69 year	4
<b><u>Onset POIS</u></b>	
since puberty	22 (49%)
In the twenties	24 (51%)

# Features of Complaints POIS

	Mean $\pm$ SD
Age of onset of complaints	26 $\pm$ 13 yr
Duration of complaints	4.6 $\pm$ 2.8 yr
<b>Start of Complaints after Ejaculation</b>	<b>N (%)</b>
<b>&lt; 30 min</b>	<b>39 (87)</b>
30- 60 min	1 (2)
60-180 min	1 (2)
180-240 min	3 (7)
1440 min	1 (2)

# Co-morbid Allergy

	N (%)
<b>atopic males</b>	<b>26 (58)</b>
<b>hay fever</b>	<b>10 (22)</b>
animals	9 (20)
house-dust mite	8 (18)
food	3 ( 7)
grass	3 ( 7)
eczema	3 ( 7)
asthma	3 ( 7)
medication	2 ( 4)
insects	1 ( 2)
detergent	1 ( 2)

# Classification & Freq. POIS Complaints (I)

Clusters	Complaints	Freq.	%
General	extreme fatigue, exhausted	36	80
	palpitations	10	22
	problems finding words	8	18
	concentration difficulties	39	87
	quickly irritated	35	78
	can not stand noise or light	4	9
	depressed mood	7	15
Flu-like	feverish, perspiration, shivery	35	78
	Ill-with flu, feeling sick, feeling cold	21	47
Head	pressure head, woolly, foggy feeling,	25	55

# Classification & Freq. POIS Complaints (II)

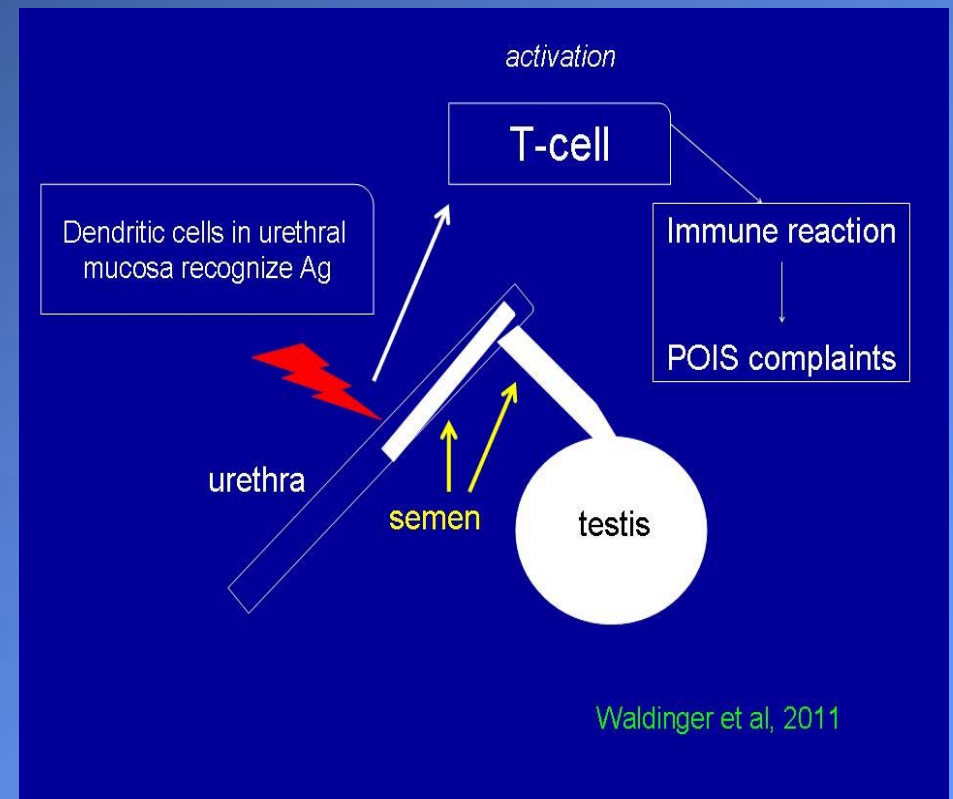
Clusters	Complaints	Freq.	%
Eyes	burning, red injected eyes	20	44
	blurred vision	10	22
	watery itching eyes	12	27
	dry, painful, pressure on eyes	9	20
Nose	congestion nose	14	31
	watery nose, sneezin	15	33
Throat	dry mouth, dirty taste	5	11
	sore throat	5	11
Muscles	muscle tension in back/neck	11	24
	muscle weakness	8	18
	muscle pain	14	31
	stiffness muscles	10	22

# Comparison of Hypersensitivity Types

Type	Alternative names	Often mentioned disorders	Mediators
<b>I</b>	<b>Allergy (immediate)</b>	<ul style="list-style-type: none"> <li>▪ <b>Atopy</b></li> <li>▪ <b>Anaphylaxis</b></li> <li>▪ <b>Asthma</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>IgE or IgG4</b></li> </ul>
<b>II</b>	Cytotoxic, antibody-dependent	<ul style="list-style-type: none"> <li>▪ Autoimmune hemolytic anemia</li> <li>▪ Thrombocytopenia</li> <li>▪ Goodpasture's syndrome</li> <li>▪ Membranous nephropathy</li> <li>▪ Graves' disease</li> <li>▪ Myasthenia Gravis</li> </ul>	<ul style="list-style-type: none"> <li>▪ IgG or IgM</li> <li>▪ (Complement)</li> <li>▪ MAC</li> </ul>
<b>III</b>	Immune complex disease	<ul style="list-style-type: none"> <li>▪ Serum sickness</li> <li>▪ Rheumatoid arthritis</li> <li>▪ Post streptococcal glomerulonephritis</li> <li>▪ Systemic lupus erythematosus(SLE)</li> <li>▪ Extrinsic allergic alveolitis</li> </ul>	<ul style="list-style-type: none"> <li>▪ IgG</li> <li>▪ (Complement)</li> <li>▪ Neutrophils</li> </ul>
<b>IV</b>	<b>Delayed-type hypersensitivity, cell-mediated immune memory response, antibody-independent</b>	<ul style="list-style-type: none"> <li>▪ <b>Contact dermatitis</b></li> <li>▪ <b>Mantoux test</b></li> <li>▪ <b>Metal joint replacement</b></li> <li>▪ <b>Chronic transplant rejection</b></li> <li>▪ <b>Multiple sclerosis</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>T-cells</b></li> </ul>
<b>V</b>	Autoimmune disease, receptor mediated (see below)	<ul style="list-style-type: none"> <li>▪ Graves' disease</li> <li>▪ Myasthenia Gravis</li> </ul>	<ul style="list-style-type: none"> <li>▪ IgM, IgG</li> <li>▪ (Complement)</li> </ul>

# Proposed Mechanism

- Autologous seminal peptides or peptides released from the disrupted urethral lining cells, contact the inner mucosal epithelium of the urethra
- During this contact, antigen(s) of semen and/or seminal fluid is recognized and taken up by dendritic cells in the epithelium
- These cells then wander to the T-cell zones of lymph nodes, where they present the seminal fluid antigen(s) to naïve T-cells and initiate the cascade of events of a hypersensitivity reaction





# Allo-allergic Reaction To Specific Protein Fractions Of Seminal Plasma Has Been Reported In Female Partners Of Males [1,2]

- The main symptoms are localized e.g. vulvo-vaginal itching, occasionally generalized urticaria and sometimes even anaphylactic shock [1,2]
- The diagnosis is based on history, skin tests, and the presence of specific IgE levels for (un)fractionated seminal plasma

1. Ohman JL Jr, Malkiel S, Lewis S, Lorusso JR. Allergy to human seminal fluid: Characterization of the allergen and experience with immunotherapy. J Allergy Clin Immunol 1990;85:103–7
2. Lee J, Kim S, Kim M, Chung YB, Huh JS, Park CM, Lee KH, Kim JH. Anaphylaxis to husband's seminal plasma and treatment by local desensitization. Clin Mol Allergy 2008;6:13

## 56% of the Current Group of Males Reported to Suffer From Lifelong PE with an IELT $\leq$ 1 Minute

- However, in the general population, prevalence of PE with an IELT  $\leq$  1 minute is  $\sim$ 2.5% [1,2]
- Relative risk of PE in POIS is 22.4-fold higher than healthy individuals
- ? induced by forced abstinence of and therefore, low frequency of sexual activity
- ? PE in these men is causally associated to immunologic factors
- However, currently, there are no data of immunologic factors relating to PE

1. Waldinger MD, Quinn P, Dilleen M, Mundayat R, Schweitzer DH, Boolell M. A multi-national population survey of intravaginal ejaculation latency time. J Sex Med 2005;2:492–7
2. Waldinger MD, McIntosh J, Schweitzer DH. A five-nation survey to assess the distribution of the intravaginal ejaculatory latency time among the general male population. J Sex Med 2009;6:2888–95.

# Hyposensitization Therapy with Autologous Semen in Two Dutch Caucasian Males: Beneficial Effects in Postorgasmic Illness Syndrome (POIS; Part 2)

Marcel D. Waldinger, MD, PhD,<sup>\*†</sup> Marcus M.H.M. Meinardi, MD, PhD,<sup>‡</sup> and Dave H. Schweitzer, MD, PhD<sup>§</sup>

- Two males suffering from POIS with positive autologous semen skin testing
- Hyposensitization program with multiple escalating dose subcutaneous injections of autologous semen every 2/52 for first year and then every 4/52 in the second and third year
- Progressive semen dilutions from 1:40,000 to 1:20

Waldinger, M.D., M.M. Meinardi, and D.H. Schweitzer, Hyposensitization therapy with autologous semen in two Dutch caucasian males: beneficial effects in Postorgasmic Illness Syndrome (POIS; Part 2). J Sex Med, 2011. 8(4): p. 1171-6.

# Hyposensitization with autologous semen

- Risks includes erythema, general POIS complaints, anaphylactic shock
- At skin reaction  $\leq$  grade 2+ - increase semen dilution
- At skin reaction  $\geq$  grade 3+ - decrease semen dilution
- Semen dilution
  - Subject 1 - 1: 40,000  $\rightarrow$  1:20
  - Subject 2 - 1 : 20,000  $\rightarrow$  1:280
- Gradual reduction of complaints resulted in 60% and 90% reduction of POIS complaints at 31 and 15 months
- In male with lifelong PE, baseline IELT of 20 seconds increased to 10 minutes at 36/12
- The cause of this association with IELT is unknown

# Limitations and Questions

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- Skin test: no control group of IC autologous-semen injection in control group of healthy males
- Why are there so little local manifestations e.g. Urethral meatus and glans penis, and so many systemic symptoms?

# What is POIS?

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POIS is not the manifestation of an allergy for autologous semen, but POIS is the systemic manifestation of an auto-immune reaction to the man's own semen

Waldinger, 2011

## Recently Finished Study

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- Fundamental Human Study
- Immunological parameters show preliminary evidence for auto-immune reaction to autologous semen
- Publication in 2015

# Conclusion

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- POIS is a post-ejaculation complex of local and systemic symptoms, which occur within sec/min/hours after ejaculation
- POIS is characterized by general physical and mental complaints
- Five preliminary Diagnostic Criteria fulfill the manifestations of POIS quite sufficiently
- POIS is probably the manifestation of an auto-immune reaction to the man's own semen
- More research is required ...



The more we know, the more we  
realize we don't know ...



**Thank You**