Adhesions, Adhesions-Related Disorder or CAPPS – a way to think about the problem from the patient's perspective.

Dallas TX. June 11 2010. The International Adhesions Society (IAS) is proud to post on its <u>adhesions.org</u> web site the results of groundbreaking and innovative research which will forever change the way the problem of adhesions is viewed.

The paper was published after Dr. Wiseman was invited to submit a manuscript for inclusion in a special volume of "Seminars in Reproductive Medicine" on the subject of adhesions. The paper is entitled: "Disorders of Adhesions or Adhesion-Related Disorder: Monolithic Entities or Part of Something Bigger—CAPPS?"

Since forming the International Adhesions Society (IAS) in 1996, it became increasingly obvious that the problems of patients suffering from adhesions were not just about adhesions. Accordingly, we were the first to coin the term "Adhesion Related Disorder" (ARD) to include the entire complex of pain, infertility, obstruction, nutrition, psychological and social issues that ARD sufferers and their families experience.

Based on formal patient surveys as well as thousands of emails and phone calls from patients, it became apparent to us that even the term ARD may be inadequate to address the problem. In reality, the ARD patient is part of a much larger group of patients who, in varying degrees, combinations and sequences experience a range of symptoms and conditions including endometriosis, interstitial cystitis (IC), irritable bowel syndrome (IBS), bowel obstruction and chronic abdominal and/or pelvic pain.

Although "adhesions" may start out as a single, stand-alone entity, an adhesions patient may develop a number of related conditions (ARD) which renders those patients practically indistinguishable from patients with multiple symptoms originating from other abdominal or pelvic conditions.

Knowing this, it becomes obvious that an adhesions patient cannot be treated merely by cutting the adhesions. Even if we could assure that adhesions would not return, the chronic nature of the patient's disease means that they will continue to suffer from pain and other pelvic symptoms. Knowing that most or all of the patient's problems are interrelated, it becomes essential that we treat the patient as a whole, and not merely as a collection of individual body parts that can be "fixed" by gynecologists, urologists, surgeons, gastroenterologists etc. separately. Lest we fall into this trap, the International Adhesions Society (IAS) advocates the use of the term "Complex AbdominoPelvic and Pain Syndrome" (CAPPS) to describe not only ARD, but to include related and overlapping conditions such as Chronic Pelvic Pain, Interstitial Cystitits, irritable Bowel Syndrome and Endometriosis. In so doing we will more appropriately direct the patient to integrated multidisciplinary diagnoses and treatments.

The paper also discusses some of our other findings about what sort of factors dictate if and how an "adhesions" patient may progress to a full blown CAPPS patient.

Commented Dr. David Wiseman, author of the paper and IAS Founder: "This paper represents a great milestone for the IAS and <a href="www.adhesions.org">www.adhesions.org</a>. We could not have conducted this work without the collaboration of the thousands of ARD patients who have visited <a href="www.adhesions.org">www.adhesions.org</a> and supported the IAS over the years. We have gone from a small web site to the foremost authority on the subject of Adhesions Related Disorder. Counted among our achievements are the pivotal role in the establishment of an ICD9 code for adhesion barrier placement; the declaration of resolutions in over a dozen State legislatures, the establishment of the world's first dedicated adhesions clinic and, most importantly, the bringing of hope and comfort to thousands of ARD sufferers and their families around the world."

As president of Synechion, Inc., a consulting and research company, Dr. Wiseman is one of the world's experts on the science and business of adhesions.

An abstract and scientific citation of the article, indexed in PubMed (<a href="http://www.ncbi.nlm.nih.gov/pubmed/18756413">http://www.ncbi.nlm.nih.gov/pubmed/18756413</a>) is reproduced below. The full article is made available here, with the kind permission of Thieme Publishers.

Wiseman, David M.:Disorders of Adhesions or Adhesion-Related Disorder: Monolithic Entities or Part of Something Bigger—CAPPS? Seminars in Reproductive Medicine 2008; 26:356-368

The purpose of this article is to review progress in the field of abdominopelvic adhesions and the validity of its two underlying assumptions: (1) The formation of adhesions results in infertility, bowel obstruction, or other complications. Reducing or avoiding adhesions will curb these sequelae. (2) "Adhesions" is a monolithic entity to be tackled without regard to any other condition.

Evidence is discussed to validate the first assumption. We reviewed progress in the field by examining hospital data. We found a growing trend in the number and cost of discharges for just two adhesion-related diagnoses, and the low usage of adhesion barriers appears in at most 5% of appropriate procedures. Data from an Internet-based survey suggested that the problem may be partly due to ignorance among patients and physicians about adhesions and their prevention.

Two other surveys of patients visiting the adhesions.org Web site defined more fully adhesion-related disorder (ARD). The first survey (N=466) described a patient with chronic pain, gastrointestinal disturbances, an average of nine bowel obstructions, and an inability to work or maintain family or social relationships. The second survey (687 U.S. women) found a high (co-) prevalence of abdominal or pelvic adhesions (85%), chronic abdominal or pelvic pain (69%), irritable bowel syndrome (55%), recurrent bowel obstruction (44%), endometriosis (40%), and interstitial cystitis (29%).

This pattern suggests that although "adhesions" may start out as a monolithic entity, an adhesions patient may develop related conditions (ARD) until they merge into an independent entity where they are practically indistinguishable from patients with multiple symptoms originating from other abdominopelvic conditions such as pelvic or bladder pain.

Rather than use terms that constrain the required multidisciplinary, biopsychosocial approach to these patients by the paradigms of the specialty related to the patient's initial

symptom set, the term complex abdominopelvic and pain syndrome (CAPPS) is proposed.

It is essential to understand not only the pathogenesis of the "initiating" conditions but also how they progress to CAPPS. In our ARD sample, not only was the frequency of women with hysterectomies (56%) higher than expected (21 to 33%), but also the rates of the "initiating" conditions was 40 to 400% higher in patients with hysterectomies than in those without. This may represent increased surgical trauma or the loss of protection against oxidative stress. Related was the higher frequency of ARD patients reporting hemochromatosis (HC; 5%) than expected (~0.5%) and the higher rates (20 to 700%) of initiating conditions in patients with HC than in those without HC. Together with findings related to the toxicity of Intergel, these findings raise the possibility that heterozygotes for genes regulating oxidative stress are at greater risk of developing surgical complications as well as more severe and progressive conditions such as CAPPS