Valley Urologic Associates

Summer 2011

VUA Newsletter Issue 4

Inside this issue:

VUA Proudly Welcomes Dr. Lipika McCauley

Valley Urologic Associates is proud to announce the addition of Lipika McCauley, M.D. Dr. McCauley completed her urology training at the University of Arizona at Tucson. Dr. McCauley, M.D. is originally from Denver, Colorado. She completed her undergraduate degree in Molecular, Cellular, and Developmental biology at the University of Colorado, Boulder. Dr. McCauley went on to complete three years of molecular biology research at Eastern Virginia Medical School in Norfolk, Virginia before entering medical school. She went on to graduate with a Doctorate of Medicine with honors from Eastern Virginia Medical School as a member of the Alpha Omega Alpha Honor Medical Society. She then relocated to Arizona to complete two years of general surgical residency followed by four years of Urology residency at the University of Arizona, Tucson. During her residency, Dr. McCauley was active in research and published multiple papers in peer reviewed journals and presentations at a plethora of local and regional urology meetings. Her research interests have included the diagnosis of kidney cancer and the prevention of kidney stones. Her mentors have hailed her as a pioneering leader in advancing patient care through scientific research. Dr. McCauley has had extensive training in all areas of urology including stone disease, urinary incontinence, urologic oncology, female urology and minimally invasive urology such as laparoscopic and robotic surgery. Dr. McCauley has an interest in all areas of urology and welcomes patients with all urologic conditions. She lives in the Valley with her husband, son and their family dog. Valley Urologic Associates welcomes Dr. McCauley to the Phoenix Valley and to our practice. She will be integral to advancing our mission, to bring state-of-the-art care to our patients with compassion and sensitivity.

Lipika McCauley, M.D. is highly trained from our own University of Arizona at Tucson

Dr. Lipika McCauley will be accepting patients starting in the Fall of 2011.

Why am I here: Blood in the Urine

Dr. Jonathan Agins, M.D.

It is essential to keep looking for up to a few years and not miss any too small to detect causes of blood in the urine

If your doctor has told you that you need to see an Urologist because you have blood in the urine, there are a few things you need to know about your visit with your Doctor at Valley Urologic Associates.

First of all, even if you haven't seen the blood yourself, this can be considered abnormal and is called Microscopic Hematuria. It is called Gross Hematuria if you have seen the blood yourself. Both are equally important to evaluate.

There are many different causes of blood in the urine. Some people will simply have blood in the urine for no reason at all, and this can be considered normal once all other causes have been eliminated. The majority of people with blood in the urine are found to have an abnormality on evaluation, however. Not all of these abnormalities require treatment, but we will often find something that does require further evaluation and treatment. Some of the causes include urinary tract infections or kidney cysts. These cysts are very common and invariably not cancerous. Other causes include an enlarged prostate, kidney stones, or a dropped bladder. There are some cases where we do discover a tumor in a kidney or in the bladder that would require treatment. Your visit with your

Urologist at Valley Urologic Associates will help identify the possible causes of blood in the urine and we will customize your evaluation accordingly.

One of the first things your Urologist will do is talk with you to identify risk factors that may put you at risk for some of the more concerning causes of blood in the urine. A physical examination may be performed at this initial visit. An examination of urine will be performed using a microscope. The microscopic evaluation is crucial because the dipstick tests that most doctors use in the office are sometimes too sensitive and may actually detect normal amounts of blood in the urine. We always want to confirm this finding to eliminate the expense of unnecessary testing. Based on this evaluation and an assessment of your risk factors, we may recommend a few additional tests.

Blood in the urine is most likely coming from the kidneys or the bladder. Imaging of the kidneys will, therefore, most likely be suggested. This may be in the form of an ultrasound or a CT ("cat") Scan. This depends on your risk factors, your kidney function, and your overall health. These studies will identify causes of blood in the urine when they originate from the kidneys or ureters (the tubes that connect the kidneys to your bladder). These studies are not very good at evaluating the bladder, in which case your Urologist may recommend cystoscopy.

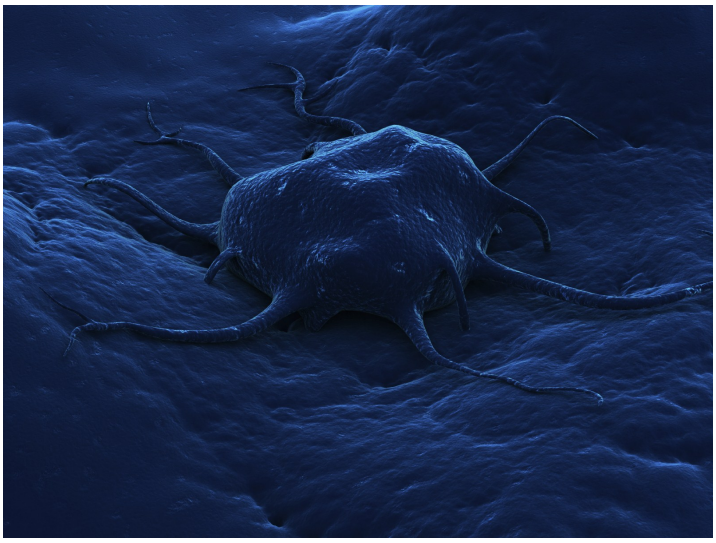
Cystoscopy is how an Urologist can see the inside of your bladder. This procedure is performed in the office and takes less than one minute. We use a small, soft, flexible lens to identify any abnormalities inside the bladder that may be responsible for the blood in the urine. This is done using a numbing jelly. Our patients have always reported to us that this procedure is simple, tolerable, and they appreciate that we do not have to do this in the hospital.

This approach is designed to investigate the causes of blood in the urine in a logical, stepwise fashion. After reviewing these studies, we will discuss treatment options based on the cause identified. Valley Urologic Associates believes in a streamlined approach to blood in the urine and usually requires two visits (an initial visit and a follow-up to review any xrays performed and perhaps to perform cystoscopy). This second visit will also include a discussion of treatment options based on our findings.

Even if your evaluation does not reveal the cause of the blood in the urine, we may recommend continued follow-up with Valley Urologic Associates or with your Primary Care Doctor. On rare occasions, the cause of the blood in the urine is too small for our current technology to identify. In these cases, it is essential to continue to look in case something develops in a few years. This follow-up may be as simple as rechecking the urine.

The Urologists at Valley Urologic Associates are all committed to improving your experience, being mindful of costs, and offering the safest and most effective treatment options. We are appreciative of the opportunity to partner with you in your journey for health. Please let us know how we may better serve you to achieve these goals.

Prostate Cancer Prevention—The REDUCE and PCPT Trials



Prostate cancer is the most common tumor in U.S. males when you exclude skin cancer and is the second leading cause of cancer death in U.S. males. There have been two large trials that have evaluated the prevention of prostate cancer: Prostate Cancer Prevention Trial (PCPT) and Reduction by Dutasteride of Prostate Cancer Events (REDUCE). Both trials used a 5 alpha reductase inhibitor as their study medication.

PCPT showed finasteride decreased the risk of developing prostate cancer by 25%. In the early phase of the study there was concern that finasteride increased the risk of men who had prostate cancer to develop high grade cancer. However after further analysis the data suggests that finasteride does not increase the risk of high grade prostate cancer. It would be unlikely for a medication to increase the incidence of a high grade tumor while at the same time decrease the incidence of a low grade. One hypothesis of why this has occurred is that five alpha reductase inhibitors can shrink the prostate by as much as 25%. When you shrink the prostate you are more likely to find the cancer on a prostate needle biopsy since the target is now smaller and prostate cancer is typically a multifocal cancer. The PCPT evaluated over 18,000 men age 55 and older with a normal prostate on exam and a PSA of 3 or less. The men were randomized to placebo or finasteride daily and followed for 7 years.

REDUCE showed that dutasteride decreased the risk of developing low grade prostate cancer by 27% but it did not decrease the risk of developing Gleason 7-10 prostate cancer. This study showed that dutasteride also reduced the risk of developing high grade PIN and atypia which will reduce the number of patients that would need to have a repeat biopsy. It is believed that dutasteride enhances the ability of PSA to detect high grade cancers since the PSA should decrease by 50%. It the PSA does not decrease by half then this would be more concerning for an underlying malignancy. The REDUCE trial evaluated over 8,000 men age 50 or older with a negative prostate biopsy, prostate volume less than 80cc, and a PSA of 2.5 to 10. The men were randomized to placebo or dutasteride daily and followed for 4 years.

These studies both reduce the risk of being diagnosed with prostate cancer but it is unknown if the medications will reduce the mortality from prostate cancer. Currently, the five alpha reductase inhibitors are not FDA approved for the prevention of prostate cancer. However, they may lead to the decreased detection of low grade malignancies which would lead to decreased over treatment of low grade cancers which have been criticized for being over treated. The down side to taking a five alpha reductase inhibitor is decreased libido and higher risk of erectile dysfunction.

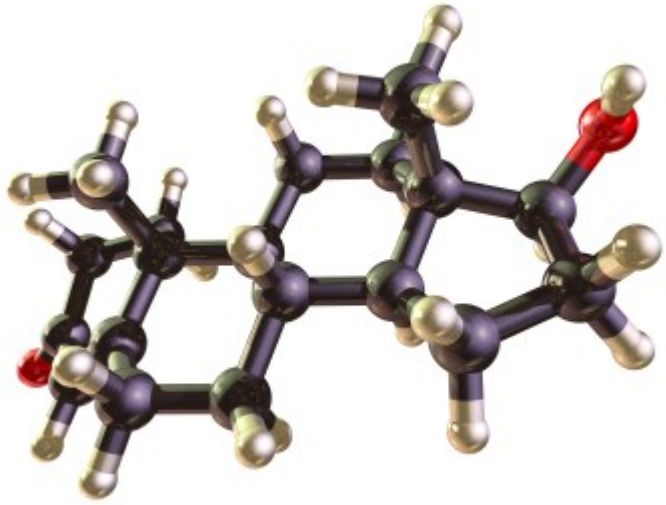
Dr. Torre Rhoades, M.D. Fellowship-Trained in Urologic Oncology

5-alpha reductase inhibitors such as Avodart (dutasteride) and Proscar (Finasteride) can reduce the risk of developing prostate cancer.

Urologic Manifestations of Other Diseases

Dr. Vi Hua, M.D.

Vitamin D deficiency has been associated with low testosterone levels.



Urologic diseases have been, in the most part, surgical, and therefore, the practice of Urology is a surgical subspecialty. However, research in basic sciences recently reminds us that we are all, as humans, very integrated. Therefore, many urologic diseases implicate non-urological medical co-morbidities, and vice-versa. For instance, don't forget the association of diabetes with increased urinary frequency caused by an osmotic diuresis from spilling sugar into the urine.

Leriche syndrome (erectile dysfunction (ED), atrophy of the leg muscles, and buttock claudication or pain with exertion) described by Robert Graham in 1814 signified aortoiliac vascular occlusive disease. Recently, many studies implicate that ED patients have higher risk of developing more severe coronary occlusive disease at an earlier age than patients that have no ED. Thus, we always counsel ED patients to undergo lipid/cholesterol screening.

Metabolic syndrome (central obesity, glucose intolerance or insulin resistance, increased triglycerides, decreased HDL, hypertension) affects 1 in 5 people in the United States. It has been implicated in prostate growth (BPH and prostate cancer). Several basic science studies has shown that Insulin-like Growth Factor 1 (IGF-1) predicts a risk of BPH and prostate cancer. In a recent article in the Journal of the American Board of Family Medicine, Dr. Tandeter assessed whether nocturia (waking up to urinate) was related to sleep apnea in 55- 75 year-old men with BPH. They found that BPH patients were at risk of significantly developing more weight gain, daytime sleepiness, snoring, and hypertension. The risks of developing Obstructive Sleep Apnea (OSA) was 1.0 with no nocturia, 2.44 with one episode of nocturia, and 5.75 and 12.3 times for two and three episodes of nocturia, respectively in men with BPH. Always feeling tired in the morning? It may be sleep apnea and not a low testosterone.

Alternatively, feeling tired all the time may be caused by low thyroid hormone (hypothyroidism). Replacing thyroid hormone can be done orally but oral testosterone or androgens are hepatotoxic (damaging to the liver). We generally give Testosterone with injections (that has very high fluctuations) or preferably with transdermal systems (patch or a gel). A new formulation, Axiron, allows a man to apply the testosterone gel to an area under the arm next to the deodorant. However, testosterone levels must be monitored, as well as liver enzymes, lipids, blood count, and PSA. Studies have also shown that low testosterone may mask prostate cancer, as PSA expression is testosterone-dependent. In a study in which men underwent prostate biopsy before starting on androgen replacement therapy, prostate cancer was found in 30.2% of men (average age 58.9 years) with a PSA between 2.0 and 4.0 ng/mL. In another study, Vitamin D was directly correlated to testosterone levels, serum sex hormone binding globulin, and free androgen index. Men who live near the North pole, work inside, are vegans, or have lactose intolerance have low vitamin D levels. We would not expect this to happen in Arizona, but there are patients exhibiting low vitamin D levels and concomitantly low testosterone. Vitamin D deficiency is quite obvious in childhood causing skeletal deformities, but in adults Vitamin D deficiency may only cause muscle cramps and bone pain due to

low serum calcium. Replacing Vitamin D may resolve low testosterone levels.

On the other hand, having too much calcium can cause kidney stones. Patients with recurrent kidney stones may have a hyperfunctional parathyroid nodule, leading to hyperparathyroidism and hypercalcemia.

Patients with recurrent stones, or have a strong family history of stones should undergo a 24-hour litholink evaluation to identify preventable factors and mitigate the formation of recurrent stones.

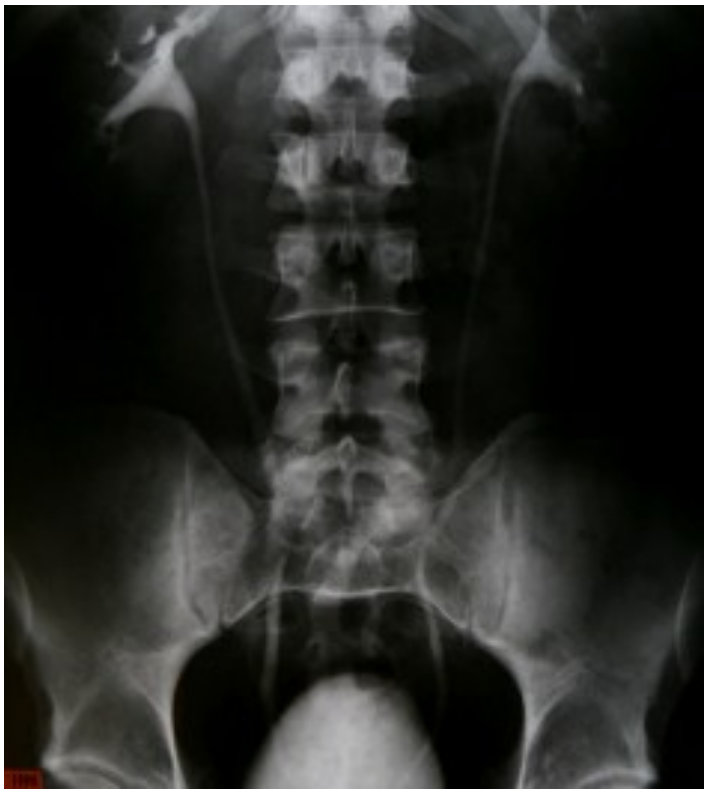
In essence, Urology is only an integral part of your healthcare team. The more we are all informed, including the patient, the better the team will perform. The physicians at Valley Urologic Associates strive to educate you and keep you informed. If we fail to do this in any way, please let us know. An informed patient is a better team member.

When Do You Need a VCUG After a UTI

Dr. Ben O. Donovan, MD
Fellowship-trained Pediatric Urologist

There is discrepancy among providers about when to order a VCUG after a febrile UTI. Older recommendations have described waiting 3 to 6 weeks after the infection. The main reason for this was to avoid detecting those children that only reflux when actively infected., therefore decrease the number of false positives. There are several reports now in the literature that recommend obtaining the VCUG earlier. Kassis et .al. showed their to be no increase in infection related complications when the VCUG is performed earlier than 3 weeks. McDonald et at. Found there to be no difference in the amount of amount or severity of VUR for those VCUG's performed within 1 week of UTI vs. greater than 1 week. In addition, they identified that nearly half of the patients did not follow-up to have their VCUG when waiting for greater than 1 week

Another topic of debate is the need to obtain a follow-up UCX before performing a VCUG. Several providers routinely perform and many radiology departments will require a repeat UCX prior to performing a VCUG. The thought behind this is that if a child has VUR and has a UTI, the VCUG may cause infected urine to reflux into the kidney and potentially lead to pyelonephritis. There are however some flaws behind this argument. First, if a child has VUR and a UTI then they would be refluxing this infected urine into the kidney multiple times a day anyway and your VCUG should not make a difference. Nowhere in the literature is there any data to show decreased VCUG complications after a negative UCX. Second, we know there is a high false positive rate with voided urine collections. Most providers do not obtain a catheter urine specimen for follow-up cultures. If a child has been treated with culture sensitive antibiotics and is asymptomatic it is safe to perform a VCUG and repeat UCX is not warranted.



There are several reports now in the literature that recommend obtaining the VCUG earlier.

Premature Ejaculation—Too Soon or Just Involuntary

Premature Ejaculation or PE effects an estimated 21% of men ages 18 to 59 in the United States. The prevalence of this problem, however, varies depending on how it is defined. There exists no universally accepted definition of PE at present. It is commonly accepted as the failure to have voluntary control over the timing of ejaculation that negatively affects the experience of both partners. PE has been classified into two forms: a primary (lifelong) form that begins when a male first becomes sexually active and a secondary (acquired) from.

Diagnosis of PE requires a detailed sexual history to distinguish PE from erectile dysfunction or ED. These conditions frequently coexist and patients who believe they have ED may actually suffer from PE. It is often misunderstood that the loss of erection is normal following ejaculation, hence the patient believes they have ED. Other items that are important in sexual history are: frequency of sexual activity, types and quality of personal relationships, and relationship to drug use or abuse.

A definitive etiology for PE is not known. Psychological causes are most commonly proposed. Some urologic conditions like prostatitis (prostate inflammation) have been thought to be linked to some cases of acquired PE, but it is primary viewed as a behavioral problem and not a physical problem.

The Treatments for PE include both behavioral therapies with a mental health professional and/or pharmacotherapy. The choice of treatment is patient dependant as both have proven efficacy. Before starting any therapy it should be gleaned from the patient's medical history whether they suffer from concomitant PE and ED. If this is the case, the ED should always be treated first. Premature ejaculation may improve when concomitant ED if effectively treated.

The primary pharmacotherapies for PE are Selective Serotonin Reuptake Inhibitors (SSRIs). These drugs, including Prozac, Zoloft, and Paxil are more commonly used to treat depression. FDA approval to use these drugs for treatment of PE does not exist, but it is a widely accepted practice. The dosages and dosing regimens for these drugs for the treatment of PE is variable. They can either be taken situationally prior to sexual activity or dosed daily. There exists no data on which regimen is optimal but both have been found effective. It must be understood by the patient that the potential side effects that these medications can cause, will be present whether they are used to treat depression or PE. It is also likely that the patient will need treatment with SSRIs on a continual basis. There is no evidence that the SSRIs provide an eventual cure of PE.

Other Drug treatment options accepted for the treatment of PE include topical anesthetic agents and Viagra. Topical anesthetic agents have been shown to increase time to ejaculation. However, they can cause reduced penile sensation as well as reduced vaginal sensation, which can be undesirable. Viagra or sildenifil citrate, has been shown to be beneficial when used in conjunction with SSRIs even in men who do not report ED. Establishing a treatment plan for ED is not always straightforward and must be tailored to the motivation and desires of both the patient and his partner.

Dr. Lynn W. Blunt, M.D.

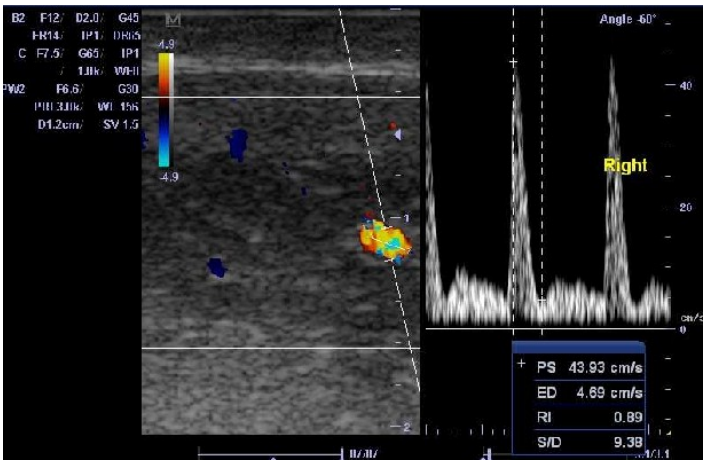
PE affects up to 21 % of men ages 18-59. Treatment involves behavioral and pharmacological therapy

Beyond The Blue Pill-Innovation and Advancement in The Treatment of Erectile Dysfunction

Dr. Shawn D. Blick, M.D.
President and Founder

Erectile Dysfunction (ED), or impotence, is a surprisingly common condition experienced by nearly 30 million American men; nevertheless, medical causes are found in 80 to 90% of the cases. Despite these statistics, the average urologist does not routinely complete a comprehensive evaluation or treatment of ED due to a lack of training and/or comfort with the topic of human sexuality. Uniquely, as an ED Specialist, I am very comfortable and well trained in the subject matter. This allows me to establish a strong relationship with my patients and to address the specific details of their condition.

Based on my diagnostic evaluations, I always advocate a specific treatment option that will work with a patient's unique value system and goals. When medications like Viagra fail, I offer several treatment options: injection therapy, urethral suppositories, vacuum erectile devices (VEDs) or the implantation of an inflatable penile prosthesis (IPP). Due to lack of reliability, spontaneity, and cost, the first 3 options fail in 70% of patients at the end of one year of follow-up. However, for some men and their significant others, a small internal pump or Inflatable Penile Prosthesis (IPP) may provide the best option. An IPP continues to demonstrate the highest levels of patient and partner satisfaction (94-98% satisfaction rates). While this treatment option is often the best solution for men who have failed other conservative therapies, it still remains a relative secret to the community at-large due to a lack of education and marketing.



In the years following the advent of medications like Viagra, millions of men have tried these medications in an attempt to improve their erectile function and regain intimacy in their lives. Unfortunately, these meds have failed in 30-40% of the patients. Under these circumstances, patients require a detailed history-physical and a panel of blood tests that may reveal reversible causes of ED. Additionally, patients can benefit from the Penile Color Doppler Ultrasound (PCDU), a specialized test that I perform to evaluate the penile arteries and veins. Besides identifying a reason for a patient's ED, the PCDU can be used to assess the risk of heart disease and the need for further cardiac assessment. ED is now being recognized as one of the earliest signs of coronary artery disease (CAD), presenting about 3 years before a heart attack or stroke. Ultimately, ED may be a warning sign for silent vascular disease, suggesting that all men with ED should see a doctor to be screened for underlying heart disease.

An IPP is a water-filled device that is placed within a small incision in a 45-minute procedure. By squeezing the pump (which is entirely contained in the scrotum), fluid is transferred to the penis, resulting in an erection. In order to return the penis to its non-erect state, the touch pads on the pump are simply depressed. After the device is placed, patients do not need medications to perform sex, and the device is free of maintenance. Patients can engage in sexual relations spontaneously and with confidence. They continue to experience normal sensations, including orgasms and ejaculations. With enhancements to these devices, infection rates are less than 1%, and mechanical failures are rare. Medicare and many commercial plans cover the procedure. As a simple minimally invasive treatment, an IPP is a life-changing event that restores the "manhood" to the men that receive them.

ED is now recognized to be one of the earliest signs of coronary artery disease

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Valley Urologic Associates

State of the Art with Compassion and Sensitivity

Valley Urologic Associates provides excellent service in **ALL AREAS OF UROLOGY**. The members of VUA are all experienced general urologists with different sub-specialties. Uniquely, this allows specific docs to treat specific problems, providing the highest level of urologic care for patients in the Phoenix Metro Area.

POSTMASTER: PLEASE MAIL TO

We are on the Web!
http://www.vuaurology.com

Valley Urologic Continues on with New Research Trials

PRECISION TRIALS

2008 Awardee
COMERICA BANK ARIZONA COMPANIES TO WATCH

VUA physicians have been tasked by several industry sponsors in partnership with Precision trials to conduct several new trials involving **prostate cancer, bladder cancer, a**nd **overactive bladder**.

Precision Trials is a physician owned and physician-led network of Practicing Physicians Research Groups (PPRG) who have dedicated themselves to integrating the highest quality of patient care with state-of-the-art Clinical Research to offer a continuum of health services and resources to benefit General Health.

Recruiting subjects from existing Doctor/Patient relationship is a powerful tool. The selection process associated with this continuum enables Precision Trials to launch new trials efficiently and expeditiously. These relationships provide our pharmaceutical and industry sponsors with consistent subject enrollment, comprehensive regulatory oversight, precision and accurate data, and a very high retention rate.

There are several locations throughout the valley. Ask your physician if you qualify as a candidate and your care and time may be reimbursed. VUA commits to bringing the state of the art care to our patients by incorporating the latest, cutting-edge products or pharmaceuticals before they arrive to Market. See our web page for more details or visit http//:www.precisiontrials.com