

Abstracts of Articles Authored or Coauthored by Permanente Clinicians

Selected by Louise Williams, PhD, Center for Health Research

From Southern California:

Sacral neuromodulation as an effective treatment for refractory pelvic floor dysfunction

Aboseif S, Tamaddon K, Chalfin S, Freedman S, Kaptein J. Urology 2002 Jul;60(1):52-6

OBJECTIVES: To determine the long-term efficacy and complications of sacral nerve stimulation as an alternative therapy for pelvic floor dysfunction. Pelvic floor dysfunction is a complex problem that can be refractory to current treatment modalities. Conservative therapy rarely results in a durable cure of patients, and various surgical procedures have significant side effects and less than optimal results.

METHODS: Sixty-four patients, 54 women and 10 men, with various forms of voiding dysfunction for whom other forms of therapy had failed underwent placement of the Medtronic Implantable Pulse Generator sacral nerve implant. The mean age was 47 years. The presenting complaint was frequency, urgency, and urge incontinence in 44 patients and chronic nonobstructive urinary retention requiring self-catheterization in 20 patients. Forty-one patients also had chronic pelvic and perineal pain associated with their voiding symptoms. The mean duration of symptoms was 69 months. All patients underwent percutaneous nerve evaluation before the permanent implant and demonstrated more than 50% improvement in their symptoms. All patients were evaluated at 1, 3, 6, 12, and 24 months, and yearly thereafter. The assessment of the voiding symptoms was done both subjectively by patient symptoms and objectively using voiding diaries recorded for three days. A validated verbal rating pain scale was used to evaluate pain levels.

RESULTS: Eighty percent of the patients had 50% or greater improvement in their presenting symptoms and quality of life after the procedure, with a mean follow-up of 24 months. Patients with frequency-urgency showed a reduction in the number of voids

per day with a significant increase in voided volumes. Patients with urge incontinence showed a reduction in leaking episodes from 6.4 to 2.0/24 hr, with a decrease in the number of pads used from 3.5 to 1.2/day. Sixteen of 20 patients with urinary retention were able to void with a residual volume of less than 100 mL. Patients with chronic pelvic pain showed a decrease in the severity of pain from a score of 5.8 to 3.7. Complications were minimal and encountered in 18.7% of the patients.

CONCLUSIONS: Sacral nerve stimulation is an effective and durable new approach to pelvic floor dysfunction with minimal complications. Test stimulation provides a valuable tool for patient selection.

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CLINICAL IMPLICATION: This article presents a new modality for the treatment of patients with severe voiding dysfunction, including severe frequency, urgency, and urge incontinence as well as inadequate bladder emptying. This procedure should be used after failure of all conservative measures as pharmacologic therapy and pelvic floor exercises. It is a relatively simple procedure compared to other invasive surgical procedures as augmentation cystoplasty. —SA

From Northern California:

Discontinuation of use and switching of antidepressants: influence of patient-physician communication

Bull SA, Hu XH, Hunkeler EM, et al. JAMA 2002 Sep 18;288(11):1403-9

CONTEXT: Although current depression treatment guidelines recommend continuing antidepressant therapy for at least four to nine

months, many patients discontinue treatment prematurely, within three months.

OBJECTIVES: To investigate the relationship between patient-physician communication and the continuation of treatment with antidepressants and to explore the demographics, adverse effects, therapeutic response, and frequency of follow-up visits.

DESIGN, SETTING, AND PATIENTS: A total of 401 telephone interviews of depressed patients being treated with selective serotonin reuptake inhibitor (SSRI) therapy between December 15, 1999, and May 31, 2000, were conducted and 137 prescribing physicians completed written surveys from Northern California Kaiser Permanente health maintenance organization outpatient clinics.

MAIN OUTCOME MEASURES: Patient-physician communication about therapy duration and about adverse effects; therapy discontinuation or medication switching within three months after start of SSRI therapy.

RESULTS: Ninety-nine physicians (72%) reported that they usually ask patients to continue using antidepressants for at least six months, but 137 patients (34%) reported that their physicians asked them to continue using antidepressants for this duration and 228 (56%) reported receiving no instructions. Patients who said they were told to take their medication for less than six months were three times more likely to discontinue therapy (odds ratio [OR], 3.12; 95% confidence interval [CI], 1.21-8.07) compared with patients who said they were told to continue therapy longer. Patients who discussed adverse effects with their physicians were less likely to discontinue therapy than patients who did not discuss them (OR, 0.49; 95% CI, 0.25-0.95). Patients who reported discussing adverse effects with their physicians were more likely to switch medications (OR, 5.60; 95% CI, 2.31-13.60). Fewer than three follow-up visits for depression, adverse effects, and

lack of therapeutic response to medication were also associated with patients' discontinuing therapy.

CONCLUSIONS: Discrepancies exist between instructions that physicians report they communicate to patients and what patients remember being told. Explicit instructions about expected duration of therapy and discussions about medication adverse effects throughout treatment may reduce discontinuation of SSRI use. Our finding that patients with three or more follow-up visits were more likely to continue using the initially prescribed antidepressant medication suggests that frequent patient-physician contact may increase the probability that patients will continue therapy.

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From Southern California:
Surgical treatment for stress urinary incontinence with urethral hypermobility: what is the best approach?

Chien GW, Tawadroas M, Kaptein JS, et al. *World J Urol* 2002 Sep;20(4):234-9

A comparative study evaluating the results of three surgical procedures for stress urinary incontinence (SUI) with urethral hypermobility. This is a retrospective study of 189 patients, evaluating the outcomes of the percutaneous needle suspension using bone anchors (PNS), abdominal suspension (AS), and pubovaginal sling (PVS). The mean follow-up was 30.5 months. In our results, the patients were divided into three groups: PNS (49), AS (34), and PVS (106). No differences were found preoperatively. Intraoperatively, PNS had the shortest operative time and lowest estimated blood loss, and it is the only outpatient procedure. However, it had the highest complication rate. PNS had the lowest satisfactory rate (16.7%). This was followed by AS (78%), PVS with cadaveric fascia (90%), and PVS with autologous fascia (94%). In conclusion, PNS is a simple outpatient procedure, but the long-term results are disappointing. Both AS and PVS gave good results. PVS was superior to AS in shorter hospitalization, early recovery and overall patient satisfaction.

Link to <http://link.springer.de/>

CLINICAL IMPLICATION: Many procedures have been described for stress urinary incontinence. Most studies have reported separate series of pubovaginal sling (PVS) and abdominal suspension (AS) with good results. In our study we were able to compare three commonly used procedures: the needle suspension, AS, and PVS. We found that PVS has the best result and patient satisfaction. On the contrary, needle suspension has the worst result and patient satisfaction. We learned from our study that the most minimally invasive procedure may not be effective for stress urinary incontinence. PVS appears to be most efficacious due to its ability to create fibrosis from the sling on the posterior bladder neck and urethra. —GC

From the Northwest:
Adapting to psychiatric disability and needs for home- and community-based care

Green CA, Vuckovic NH, Firemark AJ. *Ment Health Serv Res* 2002 Mar;4(1):29-41

The objective of the study was to describe adaptation strategies and use of formal and informal support by individuals with psychiatric disabilities, to delineate remaining needs, and to determine how home- and community-based services might address those needs. Using in-depth interviews and structured questionnaires, we examined functional status, adaptation, and needs for home- and community-based care among 33 severely mentally ill members of a large health maintenance organization. Despite success in community living, participants had significant functional deficits (physical and emotional), relied heavily on only one or two key informal caregivers, and often needed significant support from mental health professionals. Limited numbers of caregivers and social isolation placed participants at risk of negative outcomes if informal support resources were to be lost. Home- and community-based care interventions that attempt to increase informal support networks and provide instrumental help (cooking, cleaning, transport) on short notice during flare-ups could augment existing (but limited) informal caregiving, help

severely mentally ill individuals remain independent, and reduce the likelihood that loss of an informal caregiver would result in unwanted outcomes.

www.wkap.nl/prod/j/1522-3434

CLINICAL IMPLICATION: Primary care providers should be alert to special needs and risks for loss of functioning among patients with serious mental health problems. These patients may need additional support during flare-ups, are likely to have important medical comorbidities, and may be at increased risk for poor health and social outcomes if the support of informal caregivers is lost. Working with patients and caregivers to enhance informal and formal sources of community-based care could reduce risk for loss of independence and improve outcomes. — CG

From the Northwest:
Steps to Soulful Living (Steps): a weight loss program for African-American women

Karanja N, Stevens VJ, Hollis JF, Kumanyika SK. *Ethn Dis* 2002 Summer;12(3):363-71

BACKGROUND: The disproportionate disease burden experienced by African-American women can be explained partially by the higher rates of obesity in this population. African-American women who can benefit from weight loss may be less likely to attempt it and may have relatively less success in using traditional weight loss programs compared to white women. Steps to Soulful Living (Steps) was a pilot study to test the effects of a culturally adapted weight loss program on weight loss in African-American women.

METHODS: Sixty-six African-American women participated in a six-month weight loss program that included weekly group meetings and supervised exercise sessions. Mean baseline body mass index was 39 kg/m², and mean baseline weight was 107 kg. Cultural adaptations, defined as program adjustments, made in response to women's preferences as expressed in focus group interviews included changes in intervention format, the content of the group meetings, and the location and format of the exercise sessions.

RESULTS: Seventy-six percent of the participants attended at least 50% of the 26 weekly sessions, and 56% attended at least 75% of the sessions. Average hours of exercise per week approximately doubled during the program in comparison to baseline levels. Mean weight loss at 26 weeks was 3.7 kg, categorizing those who were lost to follow-up as having zero weight loss. Participants who attended at least 75% of the group meetings lost a mean of 6.2 kg at six months. Those who attended fewer meetings lost a mean of 0.9 kg.

CONCLUSIONS: This six-month program was associated with relatively larger weight losses, particularly among participants with high attendance, than have usually been observed in culturally adapted programs for African-American women.

From Colorado:
Meningococcal vaccine use in college students

Kelleher JA, Raebel MA. Ann Pharmacother 2002 Nov;36(11):1776-84

OBJECTIVE: To discuss the role of meningococcal vaccine in prevention of meningococcal disease.

DATA SOURCES: A MEDLINE search (1966-June 2001) was performed to identify key literature. Search terms included, but were not limited to, meningococcal vaccines, meningococcal meningitis, meningococcal infection, and meningococcus. The search was limited to English-language literature and references dealing with humans. The MEDLINE search was supplemented by a hand search of various bibliographies.

DATA SYNTHESIS: The impact of meningococcal disease has caused national and regional organizations to develop recommendations for use of meningococcal vaccine. Even though the meningococcal vaccine can provide benefit, limitations exist. The available vaccine does not cover all meningococcal strains and is not useful in all age groups. The appropriate target groups for prevention of disease through vaccination have been difficult to determine; vaccine use in college students is especially controversial.

CONCLUSIONS: Although a meningococcal

vaccine is available, meningococcus causes significant morbidity and mortality. Controversy exists over the meningococcal vaccine and its use. Students entering college who will be living in dormitories should be informed of the increased risk of meningococcal disease and be offered vaccination.

CLINICAL IMPLICATION: Even though meningococcal disease carries a significant risk for morbidity and mortality, not everyone is an appropriate vaccination candidate. An understanding of the vaccine and who is at an increased risk for disease is important in determining who should be vaccinated. In particular, college students living in dormitories are at an increased risk of disease, and therefore, need to be informed of their risk for meningococcal disease, as well as the benefits and limitations of the vaccine. This knowledge can help health care providers, parents, and potential vaccine candidates make more informed decisions about receiving the vaccine. —JK

From Southern California:
Health resource utilization of the emergency department headache "repeater"

Maizels M. Headache 2002 Sep;42(8):747-53

OBJECTIVE: To document the health resource utilization of patients who repeatedly use emergency department services for headache care.

BACKGROUND: Patients with headache who frequently use emergency department services may differ from patients with more typical, episodic migraine. Previous studies of health resource utilization have often failed to distinguish the high utilizer as a specific subset of the migraine population.

DESIGN: Retrospective review of urgent care/emergency department charts, clinic charts, and pharmacy rosters.

PATIENTS AND METHODS: Patients who made three or more visits for headache to an urgent care/emergency department (UC/ED) facility for headache over a six-month study period were identified and designated as "repeaters" for this study. Pharmacy pro-

files and appointment histories of 52 of the 54 repeaters whose records were available were reviewed for the 12 months prior to the study period.

RESULTS: Over the six-month study period, 518 patients visited the UC/ED 1004 times for primary headache complaints. Fifty-four (10%) repeaters made 502 visits (50% of total visits; mean 9.3, range 3-50). In the 12 months prior to the study period, 52 of these repeaters made 1832 visits to the UC/ED or clinic (mean 35.2, range 0-178): 1458 (79.6%) were headache related, and 1271 (69.4%) of all visits were to the UC/ED. An estimated 12-month cost for all visits was \$183,760. Pharmacy rosters showed use of narcotics in 41 of the 52 patients (annual mean \pm SD, 613 \pm 670 tablets), benzodiazepines in 30 patients (500 \pm 486 tablets), and butalbital products in 27 patients (395 \pm 590 tablets). Mean daily use of all symptomatic medications combined was 3.9 \pm 3.2 doses/day.

CONCLUSION: Health resource utilization of emergency department headache repeaters is predominantly headache-related acute care. Associated medication overuse is frequently present. Efforts to improve care for patients with headache will benefit from distinguishing the high utilizer as a subset of the migraine population.

CLINICAL IMPLICATION: A bias which prevents the appropriate care of headache patients who present to an Emergency Department is that they are thought of as drug seekers. Over a six-month study period, 518 patients visited the UC/ED 1004 times for primary headache complaints. Fifty-four (10%) of the patients made 502 (50%) of these visits. Thus, although the "repeaters" represent only 10% of the headache patients, every other headache visit in the ED is by a "repeater." An estimate of health-related cost for 52 of these patients in the previous 12 months was \$183,760. The ED headache "repeater" is a minority of headache patients, but uses health resources disproportionately, and may benefit from a multidisciplinary approach. —MM ❖