

Milestones

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Dear Colleagues,

Congratulations to UCSF general pediatricians that were honored this month. Elena Fuentes-Afflick, MD, MPH was the MLK Speaker at the University of Michigan (Pg. 3). John I. Takayama, MD, MPH received the Shiota Award for his published work (Pg. 3). In addition, congratulations to all the faculty and staff that presented at the APA Regional Meeting, including Naomi Bardach, who was awarded as PAS Travel Award for her research presentation.

Michael Cabana, MD, MPH
Chief, Division of General Pediatrics, Core Faculty, Institute for Health Policy Studies (IHPS)



Inside this issue:

- Primary Care Case Review 1, 7
- Congratulations/Community 2
- Research 3
- Job Postings/Faculty Corner 4,5
- Recently Published by Faculty 6
- Multicultural Corner 7
- Meetings of Interest 8

UCSF General Pediatrics Fellow Wins APA Regional Award



On January 31, 2009, Naomi S. Bardach, MD was awarded a Pediatric Academic Societies (PAS) Travel Award at the Academic Pediatric Association (APA) Regional (IX-X) Meeting in Monterey, CA. The award is presented to the most outstanding research presentations by a general pediatrics fellow and can be applied to travel to the PAS National Meeting in May 2009 in Baltimore, MD. *(continued on page 2)*

A 13 year-old girl with abdominal pain for 2 months

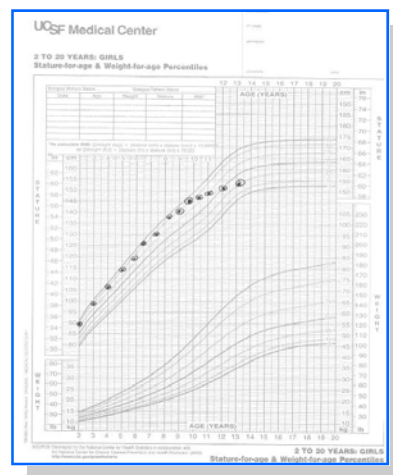
Commentary by: Neera Gupta, MD, MAS

A 13 year-old Caucasian female presents with abdominal pain (5 out of 10 on pain scale) beginning 2 months ago. She describes her appetite as normal; however, her parents feel that she is not eating as well as she previously did. She has lost 5 pounds over the past 6 months. She has 2 formed non-bloody bowel movements per day.



Past medical history is unremarkable. She is in 8th grade. Despite her pain, she has only missed 1 day of school. She lives with her parents and 11 y/o sister. She is often mistaken for the younger child in her family. Family history is unremarkable. There is no history of inflammatory bowel disease or colon cancer.

On review of systems, she denies fever, nausea, and vomiting; however the review is positive for mouth sores intermittently over the past year. She reports normal urination and denies any history of skin rash. She fell asleep in class three times over the past month, which is highly unusual for her. She was an avid soccer player, but has stopped participating over the past year due to bilateral knee pain. She has not had menarche. She used to be the tallest in her class and over the past few years has fallen on the shorter side (**Figure**).



On physical exam she is cooperative. She is afebrile. Height is 154 cm (25thtile) and weight is 40 kg (25th tile). Abdominal exam reveals right lower quadrant abdominal tenderness. No rebound. On digital rectal exam, guiac test is negative. A perianal fissure is present at the 4 o'clock position. She has no erythema, swelling, or tenderness on exam of her knees and no peripheral clubbing. She is Tanner stage 2. Remainder of physical exam is unremarkable.

Laboratory testing reveals an erythrocyte sedimentation rate of 10 mm³; white blood cell count is 10,000/mcL; hematocrit is 30%; Albumin is 3.0 g/dL; platelet count is 250,000/mcL. Liver enzymes and liver function tests, pancreatic enzymes, and celiac screen were all within normal limits. Small bowel imaging reveals a narrowing in the ileum. Further workup confirms the diagnosis. *(Turn to pg. 7 for dénouement)*

UCSF at APA Regional Meeting (Cont)



Dr. Bardach presented, "Changes Associated with Incorporating

"Present on Admission" Indicators into Risk-Adjusted Inpatients Pediatrics Performance Measures." Dr. Bardach's paper analyzed the effect of including "Present on Admission (POA)" indicators to proposed pediatric quality measures and its potential health policy implications. The study was co-authored by R. Adams Dudley, MD, MBA.

Dr. Bardach received her BA from Barnard College (New York, NY) and her MD from the University of California, San Francisco (UCSF). As a medical student, she was a Doris Duke Foundation Medical Student Fellow. She completed her pediatric residency through the Pediatric Leadership for the Underserved (PLUS) Program and also served as a chief resident at UCSF. She attends on the San Francisco General Hospital pediatric outpatient service and is an HS Clinical Instructor of Pediatrics. She is currently a second-year general pediatrics fellow and a fellow at the Philip R. Lee Institute for Health Policy Studies.

The Joint Region IX and X Meeting featured the theme of Pediatric CARE (Community, Advocacy, Research and Education). Topics included community pediatrics, child advocacy, basic or clinical sciences research, health services research, and medical education. The Academic Pediatric Association was founded in 1960 and is the professional home for general academic pediatrics. The APA fosters the health of children, adolescents, and families by promoting generalism in academic pediatrics. Regions IX and X of the APA includes the western states, including California. There were several UCSF presentations listed below.



Adam Hersh, MD presented, "Pediatrics' Perspectives on the Impact of MRSA in Primary Care: A Qualitative Study." The study was co-authored by Michael Cabana, MD, MPH, Ralph Gonzales, MD; Budd N. Shenkin, MD and Christine Cho, MD, MPH. Dr. Hersh received his MD from Dartmouth Medical School where he also earned a PhD in Decision Science at the Center for the Evaluative Clinical Sciences. He completed his residency in Pediatrics at UCSF and is currently a Clinical Fellow in Pediatric Infectious Disease and a Research Fellow in General Pediatrics.



Kristine Madsen, MD, MPH, presented, "The relationship between adolescent students' fitness and perceptions of school and community environments." The study was co-authored by Wendi Gosliner, MPH, RD, Gail Woodward-Lopez, MPH, RD, and Patricia B. Crawford, Dr.PH, RD. Kristine

Madsen, MD, MPH received her BA from the University of California, Berkeley. She received her MD at Indiana University School of Medicine and completed a combined pediatrics residency and fellowship in general pediatrics at UCSF. Her current research focuses on school-based interventions to address pediatric obesity. She attends at the WATCH Clinic and the Parnassus urgent care clinic. She is currently an Adjunct Assistant Professor of Pediatrics.

Christine L. Bottrell presented, "Community Health and Advocacy Curricula: Poised to Capture ACGME Competencies." The study was co-authored by Lynne Lamontagne Drouin, MPH, and Anda Kuo, MD. Ms. Bottrell is a fourth year medical student at UCSF and was mentored by Dr. Anda Kuo.



Dr. Kuo received her MD at the University of California, San Francisco. She completed her residency and Chief Residency at UCSF. Dr. Kuo is the Residency Director for the Pediatric Leadership for the Underserved (PLUS) Residency Program. She attends on the outpatient service at San Francisco General Hospital. She is an HS Assistant Clinical Professor of Pediatrics.



Arpi Bekmezian, MD presented, "Emergency Department Access Block: The Impact of Boarding Admitted Children." The study was co-authored by Paul J. Chung, MD, MS and was conducted at UCLA. Dr. Bekmezian received her MD from UCSF and completed her pediatric residency at UCLA. She has worked as a pediatric hospitalist at Mattel Children's Hospital at UCLA since 2005. She currently attends with the Pediatric Hospitalist Group at Parnassus and is an HS Assistant Clinical Professor.



Megumi J. Okumura, MD presented, "Changes in health status and access to care in young adults with special health care needs, results from the 2007 National Survey of Adult Transition and Health." The study was co-authored by Aimee O. Hersh, MD, and Debra S. Lotstein, MD. Dr. Okumura received her MD from New York Medical College and completed her residency in pediatrics and internal medicine at Yale. She is board-certified in both pediatrics and internal medicine. From 2006 to 2008, she was a fellow in both general pediatrics and the Philip R. Lee Institute for Health Policy Studies. She attends at the Parnassus Urgent Care Clinic and the General Internal Medicine Screening and Acute Care Clinic. Dr. Okumura is an Adjunct Assistant Professor in Pediatrics.



Congratulations to...

Elena Fuentes-Afflick, MD, MPH

On January 20, 2009, Elena Fuentes-Afflick, MD, MPH presented Pediatric Grand Rounds at the University of Michigan. Dr. Fuentes-Afflick spoke in honor of Martin Luther King, Jr. Day. The title of her presentation was "The Urgency of Now."



Dr. Fuentes-Afflick received her MD at the University of Michigan. She completed her residency and chief residency in pediatrics at UCSF. She completed a Postdoctoral Fellowship at the Phillip R. Lee Institute for Health Policy Studies, as well as her MPH at the University of California, Berkeley. Dr. Fuentes-Afflick is the President for the Society for Pediatric Research. She attends at San Francisco General Hospital and is a Professor of Pediatrics, Epidemiology and Biostatistics.

John I. Takayama, MD, MPH



On November 21, 2008, John Takayama, MD, MPH was awarded the 41st Shiota Memorial Prize for Best Published Paper in 2007, along with colleague Shiyu Aizawa, MD. The paper, "Relationship between Weight Gain during Pregnancy and Birth Outcomes" was published in *Iryo*, the Japanese National Medical Journal. The study was conducted at the National Children's Medical Center in Tokyo, Japan.

Dr. Takayama received his MD from New York University, where he was also inducted into Alpha Omega Alpha. He completed his residency in pediatrics at Yale-New Haven Hospital, where he also served as Chief Resident. He completed a Preventive Medicine Residency and MPH at the University of Washington. From 1992 to 2003 he was a member of the UCSF faculty. In 2008 he rejoined the Division of General Pediatrics.

From 2003 to 2008, Dr. Takayama served as Director of the Department of Interdisciplinary Medicine at National Children's Medical Center and the National Center for Child Health and Development (NCCHD) in Tokyo, Japan. He was the Principal Investigator for the Seiiku Birth Cohort Study, as well as the co-PI for the Pediatric Clinical Research Infrastructure Development Study funded by the Japan Ministry of Health, Labor and Welfare. He has published over a dozen peer-reviewed articles, as well as several chapters and review articles focused on resident education and primary care topics.

Dr. Takayama currently attends at the Parnassus Outpatient Clinics. He is an HS Associate Clinical Professor of Pediatrics.

Faculty/Staff Updates



On November 1, 2008, Arpi Bekmezian, MD, joined the UCSF Division of General Pediatrics. Dr. Bekmezian received her MD from UCSF and completed her pediatric residency at UCLA. She has worked as a pediatric hospitalist at Mattel Children's Hospital at UCLA since 2005. She currently attends on the Parnassus inpatient service and the urgent care clinic. She is an HS Assistant Clinical Professor.



On January 5, 2009, Ms. McConnell-Hill returned back to the Division of General Pediatrics as Administrative Assistant III after being on medical leave. She currently works at the Laurel Heights Campus.

Tom Newman, MD, MPH



On January 15, 2009, Tom Newman, MD, MPH presented at the Department of Pediatrics Grand Rounds. Dr. Newman's presentation was entitled, "How Do We Know What We Know? The Impact of Industry Funding on the Clinical Research Literature."

Dr. Newman received his MD from UC San Diego. He completed his residency in pediatrics at UCSF and received his MPH in Epidemiology from UC Berkeley. He attends at the Parnassus Nursery and the San Francisco General Hospital Outpatient clinic. He is a Professor of Epidemiology, Biostatistics, and Pediatrics and Chief of the Division of Clinical Epidemiology.

Shannon M. Thyne, MD



On January 13, 2009, Shannon Thyne, MD was featured in a *San Francisco Chronicle/SFGate* online article. Dr. Thyne was interviewed about, "How to stop sibling rivalry." Dr. Thyne offered suggestions on how to deal with the "bickering and battling that goes on between

siblings."

Dr. Thyne received her MD from the Dartmouth-Brown Medical Program. She completed her residency in pediatrics at UCSF, where she also served as Chief Resident. She attends at the San Francisco General Hospital outpatient clinics. She is currently an HS Associate Clinical Professor of Pediatrics.

For more information, please see:

http://www.sfgate.com/cgi-bin/blogs/sfmoms/detail?&entry_id=32567



Current Postings

OPEN SEARCH DIRECTOR OF UCSF CHILD AND ADOLESCENT PSYCHIATRY DEPARTMENT OF PSYCHIATRY

The Department of Psychiatry, University of California San Francisco (UCSF), provides a wide range of services to a culturally diverse group of patients, and invites applications for Director of Child and Adolescent Psychiatry. The position will be in the Tenure Track series at the Associate to Full Professor level, and can begin on **July 1, 2009**, or thereafter. Applicants must be board certified in child and adolescent psychiatry and eligible to be licensed to practice medicine in California; have demonstrated interest, commitment, and cultural competence in working with underserved and culturally diverse patient populations; have an established record of research, educational, and clinical leadership; and demonstrated ability in administration. Responsibilities include development and oversight of research programs in child and adolescent mental health; oversight of education programs—including child and adolescent psychiatry residents, and adult psychiatry residents, medical students, and other mental health disciplines who are training in child and adolescent psychiatry; oversight of clinical services—encompassing outpatient services, and consultation-liaison services within the university system and the Department of Public Health and other community agencies, including strong affiliations with the pediatrics programs at the UCSF Children’s Hospital and San Francisco General Hospital, as well as neurology, radiology, and genetics programs at UCSF; and outreach and development.

Applicants are encouraged to submit their application electronically—including CV, brief statement of interest, brief statement describing their professional background and current research activity, brief statement of contributions to diversity, teaching and/or educational program evaluations, three letters of reference, and three representative journal articles— via email to:

John L. R. Rubenstein, M.D., Ph.D.,
Search Committee Chair,
john.rubenstein@ucsf.edu
and copy: astridp@lppi.ucsf.edu

Applications will be accepted until the position is filled; however, the search committee will begin reviewing applications on July 15, 2008.

OPEN SEARCH ASSISTANT/ASSOCIATE PROFESSOR OF PEDIATRICS-UCSF

The Department of Pediatrics, University of California San Francisco (UCSF), seeks an experienced, board-certified pediatrician at the Assistant/Associate Clinical Professor

level who demonstrates excellence in clinical pediatrics as well as clinical education. Clinical focus will include urgent care general pediatrics and some primary care in an academic hospital setting. UCSF seeks candidates whose experience, teaching, research and community service has prepared them to contribute to our commitment to diversity and excellence. General pediatrics fellowship training, or four years of equivalent clinical experience is required. Pediatric emergency medicine experience and training is desired, but not required. The University of California is an Equal Opportunity/Affirmative Action Employer. The University undertakes affirmative action to assume equal employment opportunity for underutilized minorities and women, for persons with disability, and for Vietnam-era veterans and special disabled persons. Please send CV to:

Chair, Search Committee
Division of General Pediatrics,
University of California, San Francisco
3333 California Street, Suite # 245,
San Francisco, CA 94118
(415) 476-5473

OPEN SEARCH CLINICIAN-RESEARCHER UCSF CHILDREN’S HOSPITAL

The Division of General Pediatrics at the University of California, San Francisco (UCSF) is accepting applications for a faculty position. Successful candidates will have Board-Certification in pediatrics with fellowship training in health services research or academic general pediatrics. A demonstrated record of productivity and history of independent grant support is required. UCSF seeks candidates whose experience, teaching, research and community service has prepared them to contribute to our commitment to diversity and excellence.

The Department of Pediatrics at UCSF will provide facilities and support including protected time for research, mentoring, and access to world-class faculty. Clinical and teaching opportunities are available at UCSF Children’s Hospital and the general pediatrics outpatient clinics. UCSF is an Equal Opportunity/Affirmative Action employer.

Please forward curriculum vitae and letter of interest to:
Chair, Search Committee
University of California, San Francisco
3333 California Street, Laurel Heights Campus #245
San Francisco, CA 94143-0503
E-mail: michael.cabana@ucsf.edu



PEDIATRIC PHYSICAL MEDICINE AND REHABILITATION SPECIALIST

The Department of Pediatrics at the University of California, San Francisco, seeks a board certified/board eligible pediatric physiatrist. Eligible training includes PM&R residency followed by a pediatric rehabilitation fellowship or dual training in Pediatrics and PM&R, with or without a pediatric rehabilitation fellowship. The clinical focus will be consultation coverage for a four-bed comprehensive pediatric rehabilitation program at the UCSF Children's Hospital and pediatric rehabilitation outpatient clinics. Clinical education of residents and medical students is expected. Those individuals with specific interest in pediatric sports medicine and/or pain management are especially encouraged to apply. Individuals interested in programmatic development and/or research are also strongly encouraged to apply. Preference will be given to those with strong academic backgrounds and the desire to work with interdisciplinary teams.

The University of California is an Equal Opportunity/Affirmative Action Employer. The University undertakes affirmative action to assure equal employment opportunity for underutilized minorities and women, for persons with disabilities, and for Vietnam-era veterans and special disabled veterans. UCSF seeks candidates whose experience, teaching, research, or community service has prepared them to contribute to our commitment to diversity and excellence.

Please forward letter of interest and curriculum vitae to:

Amy Houtrow, MD, MPH
 Medical Director of Pediatric Rehabilitation
 Department of Pediatrics
 University of California, San Francisco
 500 Parnassus Ave, Box 0136
 San Francisco, CA 94143
 E-mail: houtrowa@peds.ucsf.edu



DIVISION OF GENERAL PEDIATRICS QUARTERLY MEETING

March 24, 2009 6:30 PM to 8:00

Speakers include Sam Hawgood, MB, BS.

Laurel Heights Rm. 263

3333 California Street

Time: 6:30 pm –8:00 pm.

Dinner is provided and CME will be credited.

Please **R.S.V.P. by Friday, March 13th** with Ms. Alex McConnel-Hill, McConnell@peds.ucsf.edu or call: 415-502-0940

Resident Research Grants

Applications are being accepted by the American Academy of Pediatrics for the Resident Research Grant Program. The due date is **February 27, 2009**. The program is designed to give pediatric residents with limited research experience an opportunity to initiate and complete research projects related to their professional interests.



Previous AAP Resident Grant Award recipients include Julie Philp, MD. Dr. Philp is studying the Complementary and Alternative Medicine use in relation to Pediatric Asthma.

Grants of up to \$2,000, as well as a travel stipend for scientific meetings are available. Grant applications will require a statement of purpose, a research plan, and a proposed budget. Applicants must also identify a project advisor who has an appropriate research background. Applicants will be asked to identify their own topics for study. A review committee convened by the Academy will oversee the solicitation of proposals, the selection of recipients and the evaluation of the grant program. Award selection will be influenced by the availability of sufficient patients for study, anticipated timeline for implementation, and applicability to the practice setting. Applicants will be required to complete their projects during their residency training. With this guideline, projects should be completed within two years. Grantees will gain experience with planning and execution of research projects and the interpretation of research findings. The grant program will be hands-on introduction to skills needed for continued career advancement and to techniques useful in practice settings.

For more information, please see:

http://www.aap.org/sections/ypn/r/funding_awards/research_grants.html

Call For Abstracts

The American Public Health Association's Call for Abstracts for the 2009 Annual Meeting to be held November 7-11 in Philadelphia, PA is now opened for submissions. The Annual Meeting theme is "Water and Public Health: The 21st Century Challenge."

All abstracts must be submitted online at <http://www.apha.org/meetings>

The deadline for submission of abstracts range from **February 9 to February 13, 2009** depending on the Section, SPIG, Caucus or Forum to which you wish to submit. All submissions will end at 11:59 pm (Pacific Standard Time) on the due date listed on the Call for Abstracts.

Recently Published By Faculty



Neilson DE, Adams MD, Orr C, Schelling DK, Eiben RM, Kerr DS, **Anderson J.**, et al.

“Infection-Triggered Familial or Recurrent Cases of Acute Necrotizing Encephalopathy Caused by Mutations in a Component of the

Nuclear Pore, *RANBP2*”. *The American Journal of Human Genetics* 2009; 84:1-8.

Acute necrotizing encephalopathy (ANE) is a rapidly progressive encephalopathy that can occur in otherwise healthy children after common viral infections such as influenza and parainfluenza. Most ANE is sporadic and nonrecurrent (isolated ANE). However, we identified a 7 Mb interval containing a susceptibility locus (ANE1) in a family segregating recurrent ANE as an incompletely penetrant, autosomal-dominant trait. We now report that all affected individuals and obligate carriers in this family are heterozygous for a missense mutation (c.1880C-->T, p.Thr585Met) in the gene encoding the nuclear pore protein Ran Binding Protein 2 (RANBP2). To determine whether this mutation is the susceptibility allele, we screened controls and other patients with ANE who are unrelated to the index family. Patients from 9 of 15 additional kindreds with familial or recurrent ANE had the identical mutation. It arose de novo in two families and independently in several other families. Two other patients with familial ANE had different RANBP2 missense mutations that altered conserved residues. None of the three RANBP2 missense mutations were found in 19 patients with isolated ANE or in unaffected controls. We conclude that missense mutations in RANBP2 are susceptibility alleles for familial and recurrent cases of ANE.



Anderson, J. “Discipline Techniques: The 9 month old” *Contemporary Pediatrics*, June 2008; 25-47; **Anderson, J.** “Discipline Techniques:

The 12 month old” *Contemporary Pediatrics*, Sep-

tember 2008; 25-84; **Anderson, J.** “Discipline Techniques: The 18-month old” *Contemporary Pediatrics*, December 2008.

This is a series by Jane Anderson, MD that describes techniques for parents for coaching parents on how to discipline infants and toddlers at various ages. In teaching discipline techniques to parents, it is important for pediatricians to emphasize the value of setting limits and saying ‘no’. A 12-month-old toddler will often display tantrums. The following are points for both parents and pediatricians to keep in mind in managing the behavior of a 1-year-old. Finally, parents of 18-month-olds are eager to learn from their pediatricians how to manage behavioral concerns, especially temper tantrums.



Bekmezian, A., Chung PJ, Yasdani S. “Staff-Only Pediatric Hospitalist Care of Patients With Medically Complex Subspecialty Conditions in a Major Teaching Hospital” *Arch Pediatr Adolesc Med* 2008; 162(10):1-6.

OBJECTIVE: To assess cost and length of stay for subspecialty patients on a staff-only general pediatric hospitalist service vs. traditional faculty/house-staff subspecialty services in a major teaching hospital. **RESULTS:** Cost averages \$11000 and \$16500, respectively, for patients on the hospitalist service compared with those on non-hospitalist services. On average, length of stay was 7.2 days and 9.8 days, respectively. In negative binomial regression analysis controlling for subspecialty, demographic data, disease severity, and average daily census, patients on the hospitalist service had 29% lower costs ($P<.05$) and 38% fewer hospital stays ($P<.01$) per admission compared with patients on subspecialty faculty/house-staff services, with no clear differences in mortality and readmission rates. **CONCLUSION:** Compared with the subspecialist faculty/house-staff system, the staff-only pediatric hospitalist system was associated with a marked reduction in cost and length of stay for patients with medically complex subspecialty diseases. In this era of resident duty-hour restrictions, and medical complexity of conditions in inpatients, staff-only hospitalist programs may have a vital role in pediatric teaching hospitals.



Bekmezian, A., Gomperts, B. “Index of Suspicion” *Pediatr Rev.* 2009 Jan; 30(1): 15-21.

Bleeding associated with elevated PT and aPTT plus thrombocytopenia should prompt the clinician to consider possible DIC. Detecting concurrent elevated fibrin split products can help establish the diagnosis. However, the underlying cause (most often bacterial infection) must be uncovered and treated to terminate this potentially deadly process. In the meantime, the often critically ill patient should be supported with broad-spectrum intravenous antibiotics and blood products and must be monitored closely.



Fuentes-Afflick, E. A Mother’s Prayer. *Academic Pediatrics* 2009; 9: 15–6.

“Doctora, do you believe that God answers our prayers?” How do you answer such a question?

...Physicians in training now are taught to consider the role of spirituality in health care, which, I think, bodes well for the future. As a resident, I was not taught how to address religious or spiritual issues with patients and families. I inferred that it was inappropriate, or even unprofessional, to address these issues in the context of clinical care. That day in clinic, however, I knew that my response to Señora Isabel’s question would open or close a door to further discussion of these matters.

Dénouement

A 13 year-old girl with abdominal pain for 2 months

(continued from page 1...) Upper endoscopy with biopsy reveals no abnormalities. Colonoscopy with intubation of the terminal ileum reveals linear ulcers, exudate, erythema, friability, and cobblestoning in the terminal ileum and cecum. Biopsies confirm the presence of ileocecal inflammation. A granuloma is present on cecal biopsies. The patient is diagnosed with *Crohn's disease*.

Crohn's disease in a subtype of inflammatory bowel disease that may affect a patient anywhere from mouth to anus. Approximately 25% of patients are diagnosed during childhood and adolescence. Approximately 10% of pediatric patients are diagnosed prior to the age of 6 and less than 4% are diagnosed prior to the age of 3. There is a preponderance of males in the pediatric inflammatory bowel disease population.

Diagnostic Issues

The presenting symptoms of Crohn's disease are variable. Common presenting symptoms of Crohn's disease include abdominal pain, weight loss, and diarrhea. Presenting symptoms may differ by age and gender. Younger children (age 0-5 years) have a higher prevalence of rectal bleeding at presentation compared with older children (age 6-17 years). Older children have a higher prevalence of abdominal pain, weight loss, or fever compared with younger children.

Girls more commonly present with mouth sores, rectal bleeding, or joint pain than boys. Growth impairment may precede the development of any intestinal symptoms; alternatively, it may be the sole manifestation of Crohn's disease. The incidence of growth impairment is greater in males than females. Patients with Crohn's disease may also suffer from delayed puberty.

Joint pain is the most common extraintestinal manifestation to precede the development of intestinal symptoms. Crohn's disease affects many other parts of the body including the eyes, the skin, the liver, the pancreas and bone.

Because of the variable presentation of Crohn's disease, it is important to consider other etiologies such as infectious disease, rheumatologic disease, vasculitis, celiac disease, appendicitis, lymphoma, and gynecologic disease. Laboratory testing may reveal an elevated white blood cell count,

elevated platelets, elevated erythrocyte sedimentation rate, elevated C-reactive protein, decreased hemoglobin and hematocrit, or decreased albumin. However, patients ultimately diagnosed with inflammatory bowel disease may have normal laboratory test results. Stool guaiac testing may reveal microscopic blood loss. Small bowel imaging may reveal mucosal irregularities, strictures, or fistulas.

A thorough clinical history, physical exam, laboratory testing, radiologic imaging, and upper endoscopy and colonoscopy with biopsy are essential for making a diagnosis of inflammatory bowel disease. Treatment includes medications, possible surgery, nutritional rehabilitation, psychological support, and colorectal cancer screening. A multidisciplinary team is required. The team may include the primary care provider, gastroenterologist, gastrointestinal nurse specialist, dietician, social worker, psychologist, psychiatrist, rheumatologist, ophthalmologist, dermatologist, endocrinologist, and surgeon.

Future Directions

Crohn's Disease is an area of active pediatric investigation and research. Investigators at UCSF are currently recruiting patients under age 21 (Tanner stage I-V) with Crohn's Disease for a study focusing on Growth in Crohn's Disease. For more information, please contact the principal investigator, Dr. Neera Gupta, UCSF Pediatric Gastroenterology (415-476-5892, # 7, # 2, # 6) for further details.

References

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- Motil KJ, et al. Growth failure in children with inflammatory bowel disease: a prospective study. *Gastroenterology* 1993; 105:681-691.



About the Author: Neera Gupta, MD, MAS received her MD from Tufts University School of Medicine. She completed her residency in pediatrics at The Floating Hospital for Children at Tufts Medical Center in Boston. While completing her fellowship in pediatric gastroenterology at UCSF, Dr. Gupta also completed the TCR Master's Degree Program in Clinical Research at UCSF. In 2006, she joined the faculty as an Assistant Professor in Pediatrics. She was awarded the CDHNF/CCFA Award for New Investigators, CCFA Career Development Award, and the NIH K23 Mentored Patient-Oriented Research Career Development Award. Her research interests include studying the natural history of disease and outcomes, with a focus on growth, in patients with pediatric inflammatory bowel disease.



Upcoming Meetings of Interest

- February 4, 2009** **Work-In-Progress Sessions:** Presenter: Rashmi Shetgiri, MD, MSHS Topic: “Partnering for Success: Youth Violence Prevention through Community Engagement” Location: LHTS Room 262 from 11:00am to 12:00pm. Lunch is provided.
- February 11, 2008** **Work-In-Progress Sessions:** Presenter: Dan Merenstein, MD Topic: “Can Foods Keep Children Healthy?” Location: LHTS Room 262 from 11:00am to 12:00pm. Lunch is provided.
- February 25, 2009** **Work-In-Progress Sessions:** John Takayama, MD, MPH Topic: “Health Care Communication: Cultural Perspectives” Location: LHTS Room 262 from 11:00am to 12:00pm. Lunch is provided. CME Credited
- March 4, 2009** **Work-In-Progress Sessions:** Presenter: Katie Zuckerman, MD Topic: “Language, ethnicity, and access to specialized services in the pediatrics primary care setting” Location: LHTS Room 262 from 11:00am to 12:00pm. Lunch is provided.
- March 11, 2009** **Work-In-Progress Sessions:** Presenter: TBA (Tentative) Topic: TBA Location: LHTS Room 262 from 11:00am to 12:00pm. Lunch is provided.
- March 18, 2009** **Work-In-Progress Sessions:** Presenter: Megumi Okumura, MD Tentative Topic: “Issues in access to health care for young adults with special health care needs” Location: LHTS Room 263 from 11:00am to 12:00pm. Lunch is provided. CME credited.
- March 25, 2009** **Work-In-Progress Sessions:** Presenter: Adam Hersh, MD, PhD Tentative Topic: “Use of Antimicrobial Stewardship Programs in Pediatrics: Results From a Nationwide Survey” Location: LHTS Room 262 from 11:00am to 12:00pm. Lunch is provided.
- April 1, 2009** **Work-In-Progress Sessions:** Presenter: Naomi Bardach, MD Tentative Topic: “Public Reporting and Pay-for-Performance in Pediatrics” Location: LHTS Room 263 from 11:00am to 12:00pm. Lunch is provided. CME credited.
- April 8, 2009** **Work-In-Progress Sessions:** Presenter: Kate Schoen Topic: “Speaking to the Press about your Published Study” Location: LHTS Room 263 from 11:00am to 12:00pm. Lunch is provided.



3333 California Street, Suite #245
San Francisco, CA 94118
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