9 November 2012

Infectious Diseases Society of America
Emerging Infections Network

Comments for Query: 'Recurrent *C. difficile* Infections (CDI)'

Comments made by 86 respondents.
State or province of practice shown in brackets, e.g., *[CA]*

Comments about the epidemiology of CDI and patient characteristics

- Worse every year. More cases and seem tougher to clear. *[WY]*
- Our nosocomial CDI rates have dropped dramatically so the issue of alternative therapies rarely needs consideration. *[LA]*
- We've had a couple of pts go on to colectomy from *C. diff*; clearly more aggressive than before. *[PA]*
- Depends on whether this infection occurred within a month of initial surgery or later as well as age and medical condition of the patient. We rarely see C diff, and relapses typically resolve with standard agents. *[TX]*
- Major problem, not curable in many patients *[NY]*
- We have not had epidemic strain of C. diff. *[MS]*
- This is probably one of the worst things a patient can get. I'd much rather have recurrent MRSA! *[NH]*
- Frustrating disease to treat for both patient and physician. *[SC]*
- It is emerging in our large community hospital and I think FMT will be a needed future therapy *[NC]*
- CDI is one of the defining and nuisance diseases of this century. One can only understand the heavy burden of this disease when one loses a patient to this illness. The treatment strong arm remains po vancomycin (my personal opinion) but I do believe that there are patient factors such as nutrition, co-existing medical conditions/illnesses that affect the outcome. *[FL]*
- We have had several patients who required colectomy and a few deaths from C. diff colitis. *[DC]*
- CDI is less common and tends to be less severe in our hospital than in others, perhaps because our patients are younger (safety net hospital, thus fewer Medicare patients. *[IL]*
- Often caused by intercurrent use of po antibiotics by PCP of URI/UTI. Now, I ask PCP to call 1st for treatment and use drugs that have little or minimal effect on bowel flora (e.g., aminoglycoside IV dosed for 3-5 d for UTI). *[VA]*
- Patient characteristics as (or more) important as strain typing in predicting relapse. Above questions do not explore this issue. Intensity of initial therapy varies with likelihood of relapse depending on patient characteristics. Use (in sequential order) metronidazole or oral vancomycin or fidaxomicin depending on age of patient, serum albumin, presence of underlying immunosuppressive disease or drugs, use of concomitant systemic antibiotics and severity of initial presentation. *[NY]*
- Some of the lesser-regarded hospitals in our area will not vigorously test for CDI nor allow fidaxomicin use. A lot of CDI is treated empirically without testing (appropriately or not). *[KY]*

Comments about drug treatment (oral vanco, fidaxomicin, rifaximin)

- Follow up is required for tapering doses. No protocols *[CA]*

- Time is of the essence. I have been impressed at how quickly patients get very ill. Fidaxomicin costly and probably best used initially. Oral vanco (IV formulation) is very inexpensive. *[AZ]*
- We have used very little fidaxomicin - we do not know if our strain is NAP1 or not and we consider longer courses of vanco even for the first episode if severe, prolonged diarrhea and a frail host *[MA]*
- Understanding practices about tapering antibiotics for C. diff would be useful. *[CA]*
- We need some better data on maintaining patients on the q3d regimen. *[NM]*
- I don't treat anybody for less than 3 weeks (for primary infection) *[GA]*
- We have not used fidaxomicin mainly because of cost. *[AZ, IN, CA]*
- Our hospital has kept fidaxomicin off formulary. *[OH]*
- Have not yet had a patient whose "recurrent CDAD" wasn't manageable with vancomycin taper, which I only use after 3rd relapse. *[MT]*
- One of GI docs here uses rifampin very often for CDI. Any data on that? *[NY]*
- I have had some success with rifaximin for recurrent disease with or without vancomycin. *[OH]*
- I have used with success chronic low dose po vanco for refractory C. diff *[IN]*
- I may consider fidaxomicin for severe C. diff in the future. *[MA]*
- I think at second relapse all pts should get tapering vanco over 30 days *[CA]*
- Most "recurrent" C diff does not meet criteria for re-treatment and can be managed without metronidazole or vanco. *[VT]*

Comments about the role of surgical treatment

- Surgical evaluation for toxic megacolon /impending peritonitis *[NJ]*
- It's always hard to know when to go to colectomy. They tolerate colectomy better if done before it gets to acute abdomen or moribund state, but some people recover from a very severe CDI even without colectomy. *[OK]*
- When is surgery indicated? *[OK]*

Fecal Microbiota Transplantation (FMT)

- Procedure at home with consenting adults is a great option; One couple decided to do procedure while my hospital was working on procedure, and did not tell me until after procedure. BUT she went to GU, and all her unneeded antibiotics were stopped!! *[CA]*
- Stool transplant is not effective for last ditch therapy before colectomy. I have done about 25 transplants. It works fabulously for the nursing home patient who won't clear despite $40,000 of oral vanc. I also think that there is a role for the post C diff patient with chronic diarrhea despite a neg C diff pcr. These patients have altered microbiota that responds to stool transplant. *[IN]*
- Had two perfect pts to whom I offered this -both w/ > 8 severe relapses- one didn't like the thought; the other had a G tube , husband was ok w/ it but daughter refused. *[IL]*
- FMT = poor science (publication bias) *[MA]*
- We have referred patients for FMT elsewhere until our GI team is up and running. *[MS]*
- Setting up FMT a real challenge due to reimbursement issues (for the procedure as well as for donor testing), blood bank concerns about using non-approved biologic material. Would love to have more official help and guidance with this (for example, some recommendations for donor testing even talk about testing for Isospora which I have never seen a case of) *[MT]*
- 1. I understand FMT is ~100% effective and we're moving in that direction to prevent colectomies. 2. A lot more severe than repeated admissions, colectomy, $3K courses of Rx. 3. Our GI guys watched procedure at Mayo and we discussed. *[NC]*
- Once or twice have sent patients elsewhere for FMT; we are presently working on protocols *[NM]*
- I struggle with which tests to order on the fecal donor. Since it's a family member/spouse, I'm tempted not to order tests for transmissible germs, yet ultimately do. What sayeth/doeth others? *[OK]*

- Although I recommend FMT occasionally, patients rarely elect to proceed *[OR]*
- A 69 yo patient undergoing colonoscopic installation of FMT was found to have a colon cancer which was subsequently resected *[WA]*
- Only 3 patients in our community have been treated with FMT to date, all in private GI practices *[OR]*
- I treated about 5 cases with FMT (great results) then got worried about legal issues, huge amount of time involved, lack of reimbursement for a lot of time, and the hospital prohibition as "experimental". *[TN]*
- Please note in the additional ?s re FMT, the volume we use depends somewhat on route of administration and we use larger volume for administration via colonoscope vs upper GI administration *[NE]*
- FMT only per IRB protocol *[OR]*
- Would be interested in knowing how centers that do FMT are getting the donor testing paid for. *[OH]*
- IDSA just worked with CMS to get CPT code for the procedure. But I have not yet had experience with it or tried to bill for the service. *[CA]*
- Only used FMT once *[TX, OR, PA]*
- On the FMT part of the survey, I answered that I administer the FMT via NGT. However, all patients for whom I have offered FMT have chosen to drink the solution in chocolate milk; I would only offer this option to those with a normal swallowing reflex. The patients also receive a PPI on the prior evening and the morning of the FMT ingestion. None has regretted this option - all have been successful. *[VA]*
- I worry about transmitting CRE etc with this stool transplant regimen. How about IBS etc?. *[NM]*
- At our institution we use a "bacterial broth" instead of FMT administered by endoscopic sb infusion by GI. It is mainly *Bacteroides fragilis* that is grown up in stock culture by the micro lab. It works well and seems to be as good as FMT. *[MO]*
- We used FMT once in a patient with CDI unresponsive to multiple modalities and it worked well. FMT has had great results for those we've used it on for recurrent CDI. *[AZ]*
- My partners and I refer our patients to the GI section of a nearby health system for FMT. *[MN]*
- For those who are doing FMT it would be great to know: precise donor (family member or not) testing and any issues identified; recipe for making what is ultimately administered; where performed endoscopy suite? is there a billing code? *[OH]*
- We have just completed a FMT policy and procedure that was passed through our infection control committee. We have not actually done any procedures under the new P&P. FMT has been performed in the past on an ad hoc basis. *[MA]*
- Testing of donors is performed by GI service, so not sure what testing is performed. *[IA, NY. ME]*
- FMT should be more widely available *[OH]*
- We had previous experience in the late 1960's with fecal transplant for a disease with called "staphylococcal enterocolitis". None since *[MN]*
- We have screened several potential donors for our GI colleagues, and 2/3 of them were POSITIVE for *C. difficile* by anaerobic culture. Both were spouses of the intended recipient. It bothers me that we are rushing into this without long-term follow-up of patients, no testing by culture for C. diff or by antigen for H. pylori etc. We are ONE INFECTIOUS DISASTER away from negative press related to this promising therapy. *[PA]*
- It has worked wonders so far; diarrhea resolves, which allows management for the other comorbidities; patients become C diff negative within a few weeks, even if they need continued antibiotics for comorbidities such as VAP or bacteremia. Save patients from disabling colectomy. *[NY]*
- GI division working on implementing FMT at our institution and I am very supportive, will use when available for second relapse or severe disease. *[TN]*

Comments on probiotics

- Why are you not asking about Lactobacilli-based probiotics? *[NY]*

- Not clear probiotics help. *[CA]*
- We have created a local guideline, but this is problematic with a thin evidence basis. I no longer recommend *S. boulardii*, despite the recommendations in many reviews. After reading the primary papers, I realized that the "benefit" was more likely the result of data torture (subgroup analysis) than an actual effect of the agent. It's not cheap, can rarely cause fungemia, and is not covered by insurance. I recommend Lactobacillus to prevent antibiotic-associated diarrhea; the jury is still out on its utility in C. diff, but it appears to be safe. *[CA]*
- Re: probiotics. I don't recommend any in pill/capsule form, but tell people to eat whatever yogurt they like that has some active cultures (assuming not immune-suppressed) *[MN]*
- I do not recommend lactobacillus as these patients have a fragile GI system and worry about transient introduction of this species into the blood stream. I hope that FMT becomes a reasonable option for recurrent disease and that po vancomycin will come to our rescue for years to come. It is not a light decision when the ID physician recommends surgical resection for severe illness and shock as the option. Hopefully it is a matter of time before we find an effective approach to this illness due to current multidisciplinary enthusiasm regarding CDI from everyone including nursing staff, surgeons, internists, patients etc, etc. *[FL]*
- Do not use probiotics. Recommend increasing intake of yogurt & cheeses along with balanced diet. *[IN]*

Future needs in diagnosis/treatment of CDI

- The IDSA/SHEA guideline needs prompt revision due to introduction of fidaxomicin. There is pressure from physicians (including ID physicians) to use fidaxomicin as the first choice for CDI. *[MO]*
- IDSA needs to help change criteria for categories on hospital acquired/associated cases of CDI *[CA]*
- I know the new test is more reliable, but I am still seeing cases I feel are C diff with negative tests, AND response to vanco. *[CA]*
- Given the frequency of the problem, it is highly distressing that we still do not have definitive data to guide our ad hoc approaches. *[BC]*
- Simple guidelines from IDSA which could be easily implemented would surely be more cost effective than fidaxomicin which I have seen prescribed by the antibiotic stewardship folks *[CA]*
- I heard somewhere that fecal microbiota in a pill form coming. How soon? How effective. *[CO]*
- Make it nationally or state reportable. Track all deaths/colectomies. Research needed on long-term safety of FMT and best approach to relapsing pt *[WI]*
- Need for national guidelines so hospitals will understand need for or no need for approval mechanisms/ consent forms, etc. *[NY]*
- 1) we need to educate our doctors NOT to prescribe unnecessary antibiotics, more so quinolones, PPIs & ceftriaxone. 2) education on the role of the environment in CDI (bleach cleaning, patient showers & not baths, pt handwashing). 3) we have started C diff rounding team at our hospital 1 1/2 months ago. Some decrease in #s noted. We will have to wait and see. *[MD]*
- A test of cure would really be helpful as I suspect other etiology in pts w "recurrent/persistent" CDI *[PA]*
- Uniform protocol and standardization would facilitate much greater use of this treatment modality. It seems to me the department with the most attributes/practice that could standardize this would be the blood bank. Perhaps IDSA should reach out to the American Association of Blood Banks for additional leadership and/or guidance in this regard. *[PA]*
- If IDSA could work on FMT as a billable procedure, along with procedure to bill for donor testing (as they do for organ transplant), that would be very helpful. It's preventing a lot of programs from offering FMT. Formal guidelines for patient selection and the procedure itself would be helpful. *[DE]*
- IDSA needs to push CMS to start covering payment for FMT *[SC]*
- Our lab recently started using the Cepheid Cdiff epi kit, but the results of 027 testing is not included in the lab result - this will be used only for IPAC purposes. *[AZ]*