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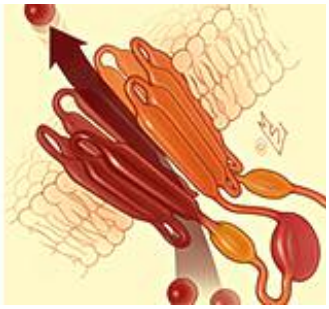

INTERVIEW WITH DR. STUART ELBORN: TRANSCRIPT

DR. PATRICK FLUME: I'm Dr. Patrick Flume, guest author of this *e*Cystic Fibrosis Review Special Edition. I am professor of medicine in pediatrics at the Medical University of South Carolina. I'm speaking now with Dr. Stuart Elborn, dean and professor at Queens University in Belfast, North Ireland, and consultant physician in the Adult Cystic Fibrosis Center. Thank you, Stuart, for being with us today.

DR. STUART ELBORN: A pleasure.

DR. PATRICK FLUME: First, can you tell me how are you currently using inhaled antibiotics in your practice?

DR. STUART ELBORN: Any patients who have chronic infection with *P. aeruginosa* would be on a long-term inhaled antibiotic regime. For other organisms, it would depend a little bit on the sensitivities, but if there is a suitable inhaled antibiotic we would also consider that in that population group.

DR. PATRICK FLUME: Are you currently using the labeled indication of month on/month off strategy for treating those patients?

DR. STUART ELBORN: We do use that regime in some patients, though historically we have used continuous Colistin in people with CF and chronic Pseudomonas infection. That was used prior to, tobramycin, for example, being licensed. The trend in our center has been that we initially alternated Colistin and tobramycin in patients who were not doing so well on continuous chromomycin. Let's say if they were having more frequent exacerbations or they were having some decline over a period of time their FEV_1, we would consider an alternating regime. Since tobramycin has been available, we have started some patients who have newly become chronically infected with Pseudomonas on alternating regimes and so we have a range of people on continuous Colistin, relatively few on alternate-month tobramycin, and an increasing number on various combinations of alternating inhaled antibiotics.

DR. PATRICK FLUME: On those patients who might receive the intermittent alternating regimen, how do you decide which patients are better suited to be on a continuous regimen?

DR. STUART ELBORN: Some of this is around the severity of the patients' imperative FEV_1, the history of exacerbations, and general symptoms, so if it was somebody who had pretty good lung function and fairly infrequent exacerbations, we might start such an individual on an alternating month regime, usually starting with inhaled tobramycin. But if they then reported having more symptoms during their off month or their exacerbations started to become an issue or symptoms or decline in FEV_1, we would quite rapidly consider putting them on continuous inhaled antibiotics.

I think part of that is in my practice, we've been used to patients being on continuous antibiotic with Colistin, so the rationale of alternating months for those assigned concerns antimicrobial resistance and trying to prevent that for the patient. If they're more symptomatic on their off month and if they're having some evidence of progression of their CF lung disease, we would consider it much more rational for them to be on a continuous antibiotic regime.

DR. PATRICK FLUME: Right. I know you know we did a study of continuous alternating therapy, known as the CAT trial. You were present when I

made that presentation at the North American Cystic Fibrosis meeting. Assuming you remember all that I had presented, what were your impressions of the trial?

DR. STUART ELBORN: First, I think the CF community has been really keen to see the results of this trial because at the moment we are prescribing somewhat empirically, although I would argue pretty logically, that continuous antibiotics are likely to be of benefit compared to alternating month regimes. This was indeed an important trial, and I think it adds to the disappointment that you weren't able to get the numbers of patients into this trial to really answer the question definitively. Although there were very good reasons for that driven by physician practice, it was difficult to recruit a cohort on alternating tobramycin to the trial then compare that to continuous alternating treatment with tobramycin and aztreonam.

So with that caveat, the data really looks like it's all trending in a direction that's favorable to the combination therapy certainly in the first couple of cycles for FEV_1, and the trends in relative risk for exacerbations suggest that continuous alternating therapy may well have some advantage over alternating month therapy with tobramycin. So although the study didn't reach the sample size required to show a significant difference, the trends are at least consistent with the notion that continuous antibiotics may well be beneficial over alternating month antibiotic regimes.

DR. PATRICK FLUME: How will this study ultimately affect or change your future use of inhaled antibiotics?

DR. STUART ELBORN: For prescribing I think it will have a relatively limited impact because we're already using these sorts of regimens in our patients. I think it will give some extra reassurance and confidence that this is a rational thing to do, even though we don't have a strong evidence base around it. Certainly I think we can be confident that continuous use of alternating antibiotics doesn't do any harm, and if I remember the data correctly, there was no strong signal of increased antimicrobial resistance in the Pseudomonas organisms isolated from the patients on continuous alternating therapy compared to those on alternating month tobramycin.

So overall I think this is a useful study in reassuring us that the practice of continuous antibiotics that I think many centers in both the United States and Europe and Australia are currently doing is a reasonable thing to be doing.

DR. PATRICK FLUME: All right, terrific. Stuart, thank you for being part of this *e*Cystic Fibrosis Review Special Edition program.

DR. STUART ELBORN: Pleasure, thank you very much.