

INTERVIEWEE: Dr. Alfred Gras
INTERVIEWER: Jessica Roseberry
DATE: September 23, 2005
PLACE: Telephone interview: Gras in South Hero, VT;
Roseberry in Durham, NC

GRAS INTERVIEW NO. 1

JESSICA ROSEBERRY: This is Jessica Roseberry, and I am talking to Dr. Alfred Gras today. He's a graduate of Duke in 1944, and he received penicillin as a student at Duke and was one of the first to do so. This is September 23, 2005, and we're speaking together over the phone. Dr. Gras is in South Hero, Vermont, and I'm in Durham, North Carolina. Thank you very much, Dr. Gras, for agreeing to speak with me today. I appreciate that. And I understand that you have prepared a few things to say today. So if you don't mind beginning, that would be wonderful.

ALFRED GRAS: Fine.

ROSEBERRY: All right.

GRAS: Are you ready for me to start?

ROSEBERRY: Yes, Sir.

GRAS: All right. As a starting note, I should say that I was—became reinterested in this whole thing after reading my father's journal, which he kept rather carefully over the years, he being a professor at Harvard Business School. At the time that all this event took place, I was a third-year medical student and had developed an ulcerative pharyngitis, which was cultured by Mary Poston as diphtheria with secondary infection of staphylococcus. I was hospitalized. No results from the sulphonamides. Developed

extensive problems from the use of the diphtheria antitoxin—massive urticaria from it. D.T. [David Tillerson] Smith called my father, and here are my notes from my father’s journal.

ROSEBERRY: Okay.

GRAS: (*reading*) “A miracle. On the thirty-first of January, 1943, to the second of February. January 31, I received a telegram from the head of the Duke Health Department that in effect Alfred—” myself— “was dying. Within twenty-four hours to the minute, I was in Duke Hospital, and Alfred was suffering from the diphtheria antitoxin and had double pneumonia. The dread staphylococcus had gotten a firm hold. Three sulfa drugs had failed to work. At that point the despairing doctor, Professor D.T. Smith, sent the telegram. On his way home, Dr. Smith thought of penicillin. He telephoned back to use it at once.” Parenthetically I should say that before I entered the hospital, I was taking care, as a clinical assistant, of a patient with a brain abscess who was receiving penicillin, who subsequently died. And I suspect that it was his penicillin left over that was used for me. But in any event: “The hospital had the supply and would telegraph for more. (So without telling me, Dr. [Edward] Levy and Dr. John Peck rigged up an apparatus for giving the stuff intravenously.) Twelve to twenty drops a minute. A constant check was made on the pulse, temperature, and the lungs, and sounds, and re-x-rayed. By the time I arrived, the increase in the pneumonia had been arrested. Next day the fever was down, never weakening the heart. Alfred was weak and thin, deathly pale, but was quite conscious. He was a not tractable patient: he had (*chuckling*) put some sulfa tablets in the drawer instead of taking them and was annoyed at doctors and nurses.” In any event, I made a complete recovery from this double pneumonia. It was diagnosed

as diphtheria followed by a double pneumonia due to staphylococcus. They made a big fuss about how much it cost, but I don't know how it was paid for. My mother's notes in her journal says it was worth over \$10,000.

ROSEBERRY: Now, was penicillin rationed at the time?

GRAS: Rationed?

ROSEBERRY: Um-hm.

GRAS: No, it was purely experimental. There was no availability on the market. It was dispensed from Mass[achusetts] General Hospital by the doctor there. And one of the problems with it was that they were giving it intravenously. Something that of course is rarely done today. And Dr. Peck and Dr. Levy had reassured me that I was getting a "vitabrew" in my legs, using my leg veins. And it thrombosed all the veins that they used, with the result that I when I was finally over the problem, I had problems with my legs, and we went to Florida for thirty days in order to effect some degree of recovery. Now, I have a couple of additional notes.

ROSEBERRY: Yes.

GRAS: One of the things that was of interest was that while I was receiving it intravenously, they used my—they collected and used my urine for wet dressings on indolent refractive infections on other patients, very effectively. There still was, of course, active penicillin in the urine. When I was well and finished medical school and was shipped out to sea in 1945 in the Navy, I had some cultures of penicillin set up for me so that I might use them on local infections. This did not work. It was a failure. When I got to Japan and had a chance at Kure in the naval hospital there to visit patients, it was amazing to me to see that the Japanese had bottles of our penicillin labeled from

the USA. The black market worked very fast. But penicillin saved my life. Now, anything you want me to add?

ROSEBERRY: If I might ask a few questions, that'd be great. Um, so what was the prognosis of pneumonia at that time without penicillin?

GRAS: Each case differs—mine was considered fatal. Oh, my father was called down, because it was decided that it was fatal. They had decided that I had reached the end.

ROSEBERRY: And so—

GRAS: With a bilateral staphylococcal pneumonia.

ROSEBERRY: And so that was obviously concerning to them, and they understood that they would need to try this experimental procedure with the pneumonia.

GRAS: Well, they assumed I was dying.

ROSEBERRY: Yes. Okay. And you had mentioned that there was another patient who had perhaps had passed away who had—

GRAS: Yes. When I was—before I became sick, I was on a clinical service on Medicine. Internal Medicine. And had a patient who had a brain abscess for which they had obtained penicillin to try and cure it, which it didn't. And he had died. But the penicillin left over from him I suspect is the penicillin that they found that was available for me (*laughs*).

ROSEBERRY: Well, that's wonderful that they were able to use that for good purpose.

GRAS: Well, they had it right away; they didn't have to get it shipped from Boston.

ROSEBERRY: Good. Good. Now, what were—as you entered medical school, had you heard about this new drug?

GRAS: No way. It was in British experimental journals.

ROSEBERRY: No.

GRAS: Nor had anybody else. Incidentally in the literature, in the *New England Journal of Medicine*, I believe I am case number twenty-three in the original report of penicillin cases treated.

ROSEBERRY: Okay. That's fascinating. And was that written by Dr. Smith?

GRAS: No, that was written by the doctor at Mass General Hospital, whose name everybody knew and I can't recall right at the moment, although he had the summary of my case.

ROSEBERRY: Okay. And that's in the *New England Journal of Medicine*. And you had mentioned some about payment as well. That the penicillin was very costly at that time.

GRAS: Well, being an experimental drug, there was no fee for it. But the actual cost was estimated for the amount that had been used on me to be \$10,000.

ROSEBERRY: Oh, I see. Okay.

GRAS: Which in those days was a fantastic amount. Remember that was sixty years ago.

ROSEBERRY: And you were sent to recover. And did you return to Duke?

GRAS: After thirty days in Florida, I was well enough to return to Duke and resume my studies.

ROSEBERRY: Okay, wonderful.

GRAS: And I graduated, I was assigned to the naval hospital in Charleston, South Carolina, and then shipped off to sea.

ROSEBERRY: Okay. Great. Well, did you continue to see Dr. Smith or other doctors at Duke on your condition?

GRAS: No. No, once I was over it, that was it.

ROSEBERRY: Wonderful. Very good. Well, I wonder if I could ask you maybe a few questions just about some other recollections that you have of Duke if that's okay.

GRAS: Shoot.

ROSEBERRY: What brought you to Duke if I might ask.

GRAS: What brought me to what?

ROSEBERRY: To Duke.

GRAS: Oh. Uh, one summer while at college at Harvard, I served a summer job at Isle au Haut in Maine and met a graduate of Duke, Tom [Thomas] Gonder, who talked me into going to Duke. I had wanted to go to medical school long before that. I'd planned, oh, since being a child—not a child but as a youngster—to go into medicine. And at Exeter, I had joined the medical society there, and from Exeter where I was going to prep school, I went on to Harvard and then on to Duke.

ROSEBERRY: What was Duke's reputation at that time?

GRAS: As a playboy school.

ROSEBERRY: Oh, really?

GRAS: The medical school was on the upgrade. The college itself was considered the playboy school.

ROSEBERRY: In what way a playboy school?

GRAS: Well, everybody had a good time, and sports were of primary importance. It was not considered one of the higher institutions of learning. The medical school was entirely separate however.

ROSEBERRY: And what are some of the classes that you remember taking?

GRAS: Some of the what?

ROSEBERRY: Some of the classes.

GRAS: Well, the routine classes that you take in school: anatomy, biochemistry, biology, surgery, dog surgery, service on the various wards, obstetrics and gynecology, medicine, surgery, dermatology, et cetera. I mean, it was a widespread education as all medical schools do.

ROSEBERRY: Did you have a class with Dr. Smith?

GRAS: Dr. Smith was professor of medicine. He was in charge of all of the courses and the wards that were under the area of internal medicine.

ROSEBERRY: Okay. And did you know him at all, or was he kind of a distant figure?

GRAS: Oh, no. No, I knew him. He knew me. No question about it.

ROSEBERRY: And what of Dr. Levy and Dr. Peck, were you familiar with them as well?

GRAS: Levy was an intern whom I knew. And Johnny Peck was a fellow member of AKK [Alpha Kappa Kappa] fraternity and was a fourth-year student at that time assigned to me for personal care. In other words, the care went from student to intern to resident to professor.

ROSEBERRY: Okay. And Mary Poston.

GRAS: Mary Poston was in charge of the bacteriology lab. A very smart lady. And she was the one who identified the diphtheria—and incidentally, where I got it, how I got it, from whom I got it, I have *absolutely* no idea.

ROSEBERRY: Huh. And I wonder if you could maybe characterize some of those people for me. Some of the things that you might remember about them.

GRAS: Gee, whiz. (*laughter*) You know, that's sixty years ago.

ROSEBERRY: Yes, Sir.

GRAS: Well, Johnny Peck married a gal who had been a roommate of my wife.

ROSEBERRY: Okay.

GRAS: My subsequent wife. No, I guess I was married at the time this happened. Ed Levy, the intern in charge, was a well-known student and liked by everybody, likeable guy. And from there on out, they were people that you looked up to. And D.T. Smith himself was a friendly, knowledgeable, intellectual. Mary Poston was a little difficult to get along with, but she was one of a kind. (*Roseberry chuckles*)

ROSEBERRY: Do you remember what you began to feel as you realized that you were getting pneumonia during your third year?

GRAS: Unfortunately I recall very, very little of my illness except for the reaction I got to the diphtheria antitoxin. I got massive hives, for which—or prior to which I developed my double pneumonia. And that was a major problem as far as I was concerned, but when pneumonia developed, I assumed it was part of the hive picture, and Levy and Peck took care of being sure that I didn't know what it was.

ROSEBERRY: Did other medical students—did they begin to realize that this was something serious and kind of—?

GRAS: I don't know how to answer that.

ROSEBERRY: Okay. The reason I did ask that question was I had heard your story as I was talking to other medical students, and as they remembered their time at Duke, they mentioned that you had received some early doses of penicillin. So that's how I first heard your story, was through them.

GRAS: Is that right? I do not recall this as being considered a very unusual event.

ROSEBERRY: That's right.

GRAS: Well, I don't recall that.

ROSEBERRY: Well, it's a great story of—

GRAS: It's an interesting story of success of penicillin.

ROSEBERRY: It is. It is.

GRAS: But the end—how they learned never to use it intravenously anymore. It thrombosed all the veins in my legs. That was a mess with my legs as a result of that.

ROSEBERRY: Did that cause any difficulty?

GRAS: You're darn right it did: pain and swelling; at one point, they had—my ankle looked abscessed. As a matter of fact, it was at that point they stopped the penicillin.

ROSEBERRY: Oh, really?

GRAS: According to my notes that I have here. However, at that point also, the pneumonia was subsiding nicely and was being handled by my own natural immune system.

ROSEBERRY: So what would have been a better course of action to—?

GRAS: Well, of course to give it intramuscularly.

ROSEBERRY: Okay.

GRAS: Which is (*laughing*) the way it's given today. Or locally, (*laughing*) the way my urine was used.

ROSEBERRY: Good. Well, as you look back on it now, how—what thoughts do you have about that event or experience?

GRAS: Well, grateful. And nothing special about it. As a matter of fact, I had a long time reading my mother's notes, which are very emotional about the whole thing, before I really became interested in it again. And that was about a month or so ago. I haven't been able to find those notes since.

ROSEBERRY: So you said it was the—would it have been the twenty-third case reported maybe?

GRAS: I believe it was case number twenty-three in the first report in the *New England Journal of Medicine*. And that would have been subsequent to my illness and so on, and so it would be sometime in the latter part of 1943.

ROSEBERRY: Okay. Now, I understand that penicillin later became almost a wonder drug in the popular press, and people were very—they were requested it of their doctors, and people talked about the miraculous nature of penicillin. And I wonder—you had experienced quite an amazing turnaround yourself, and I wonder if you had thoughts about those.

GRAS: Well, at that time of course I did not know I was getting penicillin. I thought I was getting "vitabrew." I did not know I had bilateral staphylococcal pneumonia. All I knew was I was suffering from the reactions to the antitoxin. However, in my father's notes, the paragraph begins with, "A miracle. Thirty-first of January, '43, to second of February." So it was considered a miracle by other people.

ROSEBERRY: And may I ask what field of medicine you entered?

GRAS: I went into practice in Newark, New Jersey, doing internal medicine, and subsequently got called back into service again during the Korean War, and practiced in both Newark and Nutley, New Jersey. And in 1975, I had a coronary and cardiac problems, which put me out of business, and they told me to retire, so I retired to Vermont. And after a month or so, I got tired of being retired (*Roseberry chuckles*) and went back to work here in Vermont. Worked here for five years and then had an accident which has messed up my back and legs so that I am in a wheelchair and on canes now. But that has nothing to do with penicillin.

ROSEBERRY: Well, thank you very much, Dr. Gras, for telling that story to us. I don't know if there's anything that I have neglected to ask you that you feel needs to be said today on the record.

GRAS: Well, if there's anything else, let me know.

ROSEBERRY: Okay. Let me turn this off really quickly, and I'll mention one other thing to you if it's okay.

(end of interview)