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This Week's Citation Classic[®]

Rosenow E C III. The spectrum of drug-induced pulmonary disease. Ann. Intern. Med. 77:977-91, 1972. [Mavo Clinic and Mayo Foundation, Rochester, MN]

This is a review of all the known adverse drug reactions as they affect the lung parenchyma, airways, and pleura and includes their clinical as well as radiologic presentations. [The SCI® indicates that this paper has been cited in over 205 publications since 1972.1

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My interest in the adverse effects of drugs began with the recognition of first one and then four more cases of pulmonary fibrosis related to chronic nitrofurantoin use.¹ At that time, there were only scattered case reports of some unusual reactions in the lungs to sulfa, para-aminosalicylate, and a few other drugs that produced a pulmonary infiltrate and eosinophilia, and a couple of other reports related to ganglionic blocking drugs used as antihypertensive agents, producing an irreversible pulmonary fibrosis. But the reports did point out that some drugs can produce serious and sometimes irreversible sequelae.

As a result of the publication of this paper on our five patients with chronic nitrofurantoin pneumonitis and fibrosis, I started to look around and realize that there were just beginning to be a number of isolated case reports about other adverse drug reactions on the lungs. I began to spend a number of hours in the library going through the Index Medicus, as in the late 1960s and early 1970s we did not have computerized printouts, Medline searches, and so on. Almost all of these hours were spent at noon, evenings, or weekends:

and in those days before copying machines were available, over half the iournals and texts were signed out of the library and thus not available. Instead, you had to abstract the article and use those notes to write the paper. All of this is very familiar to anybody doing a literature search before 10 years ago. Sometimes I would wait two to four weeks before I could get hold of an article, or sometimes I would even call a colleague who had withdrawn a iournal to borrow it for a few hours.

If I had to make a guess as to why this particular paper has been successful, I would relate it to luck in timing. When I began this research in the late 1960s, there were many single case reports of a number of drugs producing pulmonary disease. At that time, nobody had put it together. I was also fortunate that, after I finally pulled everything together, there were very few new adverse drug reactions on the lungs in the next decade. My paper remained timely for at least 8 or 10 years in spite of the fact that a number of subsequent papers were published by others, but usually in more narrow areas such as chemotherapeutic-induced lung disease.

Finally, I have to give credit to the editor, Edward Huth, and two reviewers who took an inordinate amount of time to critique my paper with extremely valuable ideas that resulted in a much more polished paper. Of course, I do not know who these reviewers were. but I have often thought over the years that I wish I could thank them. I think authors forget the role that good reviews play. I have gotten a lot of mileage from this particular paper, mostly in the way of giving innumerable talks around the country on this subject, and have contributed a number of other articles, maybe not in as great depth, but along the same line since then.²

Rosenow E C III, DeRemee R A & Dines D E. Chronic nitrofurantoin pulmonary reaction. N. Engl. J. Med. 279:1258-62, 1968. (Cited 100 times.)
Rosenow E C III. Drug-induced lung disease. Semin. Respir. Med. 2:45-96, 1980.