



Vintage Moertel

Carl G. Kardinal

To cite this article: Carl G. Kardinal (1994) Vintage Moertel, *Oncology Issues*, 9:6, 3-3, DOI: [10.1080/10463356.1994.11904499](https://doi.org/10.1080/10463356.1994.11904499)

To link to this article: <https://doi.org/10.1080/10463356.1994.11904499>



Published online: 18 Oct 2017.



Submit your article to this journal [↗](#)



Article views: 1



View related articles [↗](#)



Vintage Moertel

by Carl G. Kardinal, M.D.

An editorial tribute to a man such as Charles G. Moertel, M.D., must undoubtedly start with a chronology of demographic data. He was born in Milwaukee, Wisc., on Oct. 17, 1927, and died June 27, 1994, at his home in Rochester, Minn. He was 66. Yet, demographic data and a listing of accomplishments cannot capture the flavor of this complex, multifaceted man.

Chuck, to those who knew him well, made many contributions to oncology. He will be remembered foremost for his critical methods in the conduct of clinical trials. He was his own most disciplined critic, insisting on controlled prospectively randomized trials with sufficient numbers to assure statistical significance. He scoffed at the use of historical controls, and never fearful of being controversial, stated in the 1970s that "historically controlled adjuvant studies are always positive." Of course, he was proven to be correct.

Chuck took on a series of politically loaded issues such as Laetrile and high-dose vitamin C for the treatment of cancer. In the 1970s, Laetrile was being promoted as a non-toxic cancer cure. Chuck coordinated a major clinical trial in the United States that confirmed that not only was Laetrile ineffective in the treatment of cancer, but it was also toxic.

High-dose vitamin C had been promoted by the Nobel Laureate Linus Pauling for the treatment of a variety of disorders, including cancer. Again, Chuck took on the emotionally charged issue and conducted a prospectively randomized trial confirming that high-dose vitamin C is worthless in cancer treatment.

Nowhere, however, has the character of an individual been better illustrated than in Chuck's unpublished tongue-in-cheek lecture describing the "FLOP" protocol. I am indebted to Dr. Michael O'Connell, chairman of the North Central Cancer Treatment Group (which Chuck founded in 1977), for a copy of FLOP.

Chuck begins the FLOP lecture by describing the wide discrepancy of 8 to 85 percent in the reported response rates to 5-FU in metastatic colorectal cancer. "Don't you wish you could be one of those fellows who could achieve results way up there instead of one of us poor unfortunate slobs down at the bottom?"

He goes on to state that at cancer meetings spectacular results are often reported by well-known investigators, but try as you will, these new methods just do not work out as well after you get home. You wonder if they are holding back a little and if some of their secrets were not revealed.

Continuing, Chuck states that there are a few tricks of the trade that you must know if you are going to achieve prominence in the chemotherapy game. First, you must select an appropriate name for your new treatment. COP, MOPP, VAMP, and FAM have been successful. How about FLOP? He went over the list of drugs available: "F" for fluorouracil, "L" for levamisole, "O" for oncovin, and "P," yes, platinum, and away you go.

Chuck then describes a series of studies he performed evaluating tumor measurements. He placed golf balls, baseballs, and croquet balls on a mattress and then covered them with a layer of foam rubber approximately the thickness of skin

and subcutaneous tissue. A group of experienced oncologists were asked to measure these masses. The balls were then repositioned, and the experts were asked to measure them a second time. Using a 50 percent reduction in the product of the diameters as a PR, there was an 8 percent objective response rate. If the criteria were loosened to a 25 percent reduction, the response rate increased to 19 percent.

The final step was to eliminate as many patients as possible who failed to respond to FLOP.

"You point out that the high rate of unanalyzable cases actually offers clear evidence of the rigid nature of your case review, ensuring that only the highest quality data are used in the final analysis." FLOP became a therapeutic triumph with an objective response rate of 55 percent.

"Your fame as an oncologist has been assured. You've been listed in *Good Housekeeping* as one of the country's best oncologists. Your grant and contract income multiplies ten-fold, and you have been made a full professor."

Chuck concludes on a more serious note that we in clinical cancer research hold a public trust and have an obligation to communicate fact, not wishful fantasy. Progress in cancer treatment must be built on a foundation of truth established by the scientific method. Chuck lived as well as promoted truth in clinical trials. His individual contributions to the treatment of colorectal cancer have made a major impact on cancer therapy. Individual regimens come and go, but the methodology taught us all by this giant of oncology will live forever. FLOP is vintage Moertel. ■