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What if Fleming had not discovered penicillin?

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What would have happened had Alexander Fleming not discovered penicillin in 1928? Perhaps the obvious answer is that, someone else would have discovered penicillin during 1930s and the Oxford Group would still have purified it sometime in the early 1940s. Here, however, in this counterfactual account of the penicillin story, it is argued that without Fleming, penicillin might still be undiscovered and the antibiotic age would never have dawned. As a result, many of the recent developments in medicine, such as organ transplantation, might have been delayed or, at best, made more hazardous. Penicillin might have come onto the scene a few years later but, had Fleming overlooked the discovery, it seems certain that penicillin would not have saved countless Allied lives, during and after D-Day. Instead of having enjoyed fifty and more years of the antibiotic age, it is argued here, that we would have had to rely upon highly developed sulphonamides, so-called "supasulfa", and other chemically-derived antibacterial drugs. Indeed, it might be the case that, even well into this new millennium, the antibiotic age has yet to dawn, and medicine is still waiting for someone to chance upon penicillin. Here we discuss what might have happened had Fleming not discovered penicillin and come to the conclusion that the medical armoury available today would have been far different and might have relied solely upon highly developed varieties of sulphonamides or similar, synthetic, non-antibiotic antibacterial agents.

Biography

Asmaa Faden has completed her PhD in Oral Medicine from University of London- Eastman Dental Institute, UK and has been trained in molecular techniques in Collindale Laboratories, as part of her PhD study. Presently she has been working as an Associate Professor in Oral Medicine/College of Dentistry and also she is a Vice Dean for Female Students Affairs, Preparatory Year Deanship, King Saud University, Riyadh. She has more than 15 years' experience in both teaching and research activity. She has participated in several international, national conference, symposia, and workshops and presented her research papers in several countries. She has published many papers in reputed national, international and ISI journals and is serving as an editorial board member of reputed journal and also has lifetime membership of dental associations worldwide.

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