# How (not) to communicate new scientific information: a memoir of the famous Brindley lecture

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In 1983, at the Urodynamics Society meeting in Las Vegas, Professor G.S. Brindley first announced to the world his experiments on self-injection with papaverine to induce a penile erection. This was the first time that an effective medical therapy for erectile dysfunction (ED) was described, and was a historic development in the management of ED. The way in which this information was first reported was completely unique and memorable, and provides an interesting context for the development of therapies for ED. I was present at this extraordinary lecture, and the details are worth sharing.

The lecture, which had an innocuous title along the lines of 'Vasoactive therapy for erectile dysfunction', was scheduled as an evening lecture of the Urodynamics Society in the hotel in which I was staying. I was a senior resident, hungry for knowledge, and at the American Urological Association I went to every lecture that I could. About 15 minutes before the lecture, I took the elevator to go to the lecture hall, and on the next floor a slight, elderly-looking and bespectacled man, wearing a blue tracksuit and carrying a small cigar box, entered the elevator. He appeared quite nervous, and shuffled back and forth. He opened the box in the elevator, which became crowded, and started examining and ruffling through the 35mm slides of micrographs inside. I was standing next to him, and could vaguely make out the content of the slides, which appeared to be a series of pictures of penile erection. I concluded that this was, indeed, Professor Brindley on his way to the lecture, although his dress seemed inappropriately casual.

The lecture was given in a large auditorium, with a raised lectern separated by some stairs from the seats. This was an evening programme, between the daytime sessions and an evening reception. It was relatively poorly attended, perhaps 80 people in all. Most attendees came with their partners, clearly on the way to the reception. I was sitting in the third row, and in front of me were about seven middle-aged male urologists, and their partners in 'full evening regalia'.

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Professor Brindley, still in his blue tracksuit, was introduced as a psychiatrist with broad research interests. He began his lecture without aplomb. He had, he indicated, hypothesised that injection with vasoactive agents into the corporal bodies of the penis might induce an erection. Lacking ready access to an appropriate animal model, and cognisant of the long medical tradition of using oneself as a research subject, he began a series of experiments on self-injection of his penis with various vasoactive agents, including papaverine, phentolamine and several others. (While this is now commonplace, at the time it was unheard of.) His slide-based talk consisted of a large series of photographs of his penis in various states of tumescence after injection with a variety of doses of phentolamine and papaverine. After viewing about 30 of these slides, there was no doubt in my mind that, at least in Professor Brindley's case, the therapy was effective. Of course, one could not exclude the possibility that erotic stimulation had played a role in acquiring these erections, and Professor Brindley acknowledged this.

The Professor wanted to make his case in the most convincing style possible. He indicated that, in his view, no normal person would find the experience of giving a lecture to a large audience to be erotically stimulating or erection-inducing. He had, he said, therefore injected himself with papaverine in his hotel room before coming to give the lecture, and deliberately wore loose clothes (hence the tracksuit) to make it possible to exhibit the results. He stepped around the podium, and pulled his loose pants tight up around his genitalia in an attempt to demonstrate his erection.

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At this point, I, and I believe everyone else in the room, was agog. I could scarcely believe what was occurring on stage. But Professor Brindley was not satisfied. He looked down sceptically at his pants and shook his head with dismay. 'Unfortunately, this doesn't display the results clearly enough'. He then summarily dropped his trousers and shorts, revealing a long, thin, clearly erect penis. There was not a sound in the room. Everyone had stopped breathing.

But the mere public showing of his erection from the podium was not sufficient. He paused, and seemed to ponder his next move. The sense of drama in the room was palpable. He then said, with gravity, 'I'd like to give some of the audience the opportunity to confirm the degree of tumescence'. With his pants at his knees, he waddled down the stairs, approaching (to their horror) the urologists and their partners in the front row. As he approached them, erection waggling before him, four or five of the women in the front rows threw their arms up in the air, seemingly in unison, and screamed loudly. The scientific merits of the presentation had been overwhelmed, for them, by the novel and unusual mode of demonstrating the results.

The screams seemed to shock Professor Brindley, who rapidly pulled up his trousers, returned to the podium, and terminated the lecture. The crowd dispersed in a state of flabbergasted disarray. I imagine that the urologists who attended with their partners had a lot of explaining to do. The rest is history. Professor Brindley's single-author paper reporting these results was published about six months later.[1]

Professor Brindley made a huge contribution to the management of ED, for which he deserves tremendous gratitude. He was a true lateral thinker, and applied his unique mind to a variety of problems in medicine. These include over 100 publications that focus on the areas of visual neurophysiology and several other aspects of neurophysiology, including ejaculation and female sexual dysfunction. He also published one remarkable paper studying the effect of 17 different drugs used intracorporally to induce erection.[2] Seven of these (phenoxybenzamine, phentolamine, thymoxamine, imipramine, verapamil, papaverine, naftidrofury) induced an erection. It is not clear to what degree Brindley's own penis served as the test subject for these studies.

This lecture was unique, dramatic, paradigm-shifting and unexpected. It is difficult to imagine that a similar scenario could ever take place again. Professor Brindley belongs in the pantheon of famous British eccentrics who have made spectacular contributions to science. The story of his lecture deserves a place in the urological history books.

## REFERENCES

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