

Dr G. Griffiths

REPORT ON MEETING WITH DR FRANCIS ROE ON
MONDAY, NOVEMBER 13th 1972

The discussion opened with Dr Jefferson and Dr Adams explaining to Dr Roe that Johnson & Johnson had been approached by Prof. Griffiths of The Tenovus Institute to join in a meeting with him and Professor Volcani to discuss a proposed research programme at Tenovus into the relationship between talc and tissue damage. It was explained that in view of previous untimely and inaccurate publicity Johnson & Johnson were not anxious to be linked with Tenovus, but should such a meeting be unavoidable we were anxious to have expert and independent advice at the meeting.

Dr Roe agreed that previous work at Tenovus had been poor scientifically, and felt that the situation needed to be approached with caution. He felt that two lines of approach would be wise:-

1. If any involvement with Tenovus became necessary, not to give them any cash, but to control the characterisation of the talc samples and provide these - so that at the end of an experiment it is possible to categorically show that the material seen is the same as that used at the beginning.
2. Dr Roe thought it would be wise if the major talc manufacturers, i.e. Yardleys, Johnson & Johnson, Boots, etc combined together to carry out thorough independent scientific and possible epidemiological studies into talc with the help of the most experienced teams in the country so that they were in a strong position to defend talc and refute any unscientific work. He felt that providing the talc was characterised this should not mean that they were defending any unorthodox talc manufacturers as well.
3. Dr Roe said that he would be prepared to attend a meeting with Tenovus should the occasion arise.

Discussion of work proposed by Tenovus and experimental studies that Dr Roe thought would be wise.

Dr Adams outlined some aspects of the work that Tenovus wished to carry out, as far as he had been able to ascertain. He said that there were to be experiments involving:-

1. Tissue culture using ovaries from animals.
2. Experiments transplanting ovaries into another animal after they had been injected with talc.
3. Experiments involving scratching the surface of ovaries of animals, sprinkling with talc, and observing for tissue damage.

Dr Roe thought that with the exception of the tissue culture work (which would certainly produce positive results) the experiments would produce a lot of negatives.

Dr Roe went on to say that the physical properties of talc were very important to the biological properties. If talc was finely crushed the lungs would filter out the particles whereas if they were long particles they could penetrate through and be absorbed into the lung. There they could be disposed of by the macrophages or, as in the case of asbestos, lead to a foreign body reaction and possibly to cancer formation.

Concerning the proposed transplant work Dr Roe felt this could lead to many difficulties. He said that if ovaries from one animal were transplanted into another animal, after the animals own ovaries had been removed unusual results could be obtained because of the change in hormone patterns and depending on the site of transplantation. Hence if an ovary was transplanted into the Spleen, the ovarian hormones were destroyed in the liver, and there was no feedback to the pituitary. This led to no control of ovarian growth and hormone production and ovarian tumours were produced in the Spleen.

Dr Roe touched on the many problems involved in carcinogenicity studies. He said that mice were unusual and not reliable in view of the high incidence of spontaneous tumours. He also spoke of certain strains of animal in whom a virus could produce cancer and a foreign substance introduced could activate the virus so that it might not be the foreign substance which was the direct cause of the cancer.

Dr Roe discussed a possible carcinogenicity test in hamsters and rats where only females would be used and he talked in terms of £40-00 an animal for experimental work including pathology. In April next year he will be joining a small group including Kenneth Harper from the Huntingdon Laboratories and would be interested in carrying out work for Johnson & Johnson. He did mention the M.R.C. unit in Wales as a good centre for work, and also said that if epidemiological studies were to be undertaken he would recommend Sir Richard Dolls' department at Oxford. Dr Roe also mentioned Dr Morgan at Harwell - his work with X-ray diffraction technique and he said if anyone should look at talc in tissues it should be him.

A comment that was made during discussion was that since a Baby powder was being produced should some experiments be carried out in young animals since the filtration mechanisms may be different. However Dr Roe did not think this should be embarked on at this stage.

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Carcinogenicity Experiments At Consultox.

Dr Adams did not specifically mention that we had experiments in progress, but asked some general questions. Dr Roe said that if you had a mouse carcinogenicity experiment in progress the time of sacrifice depended on whether you were carrying out the test as a regulatory requirement or not. If it was regulatory then you could sacrifice them at the predetermined eighteen months (eighty weeks) and find the things that you wanted to find to produce a negative result. But if you really wanted to find out if the material caused cancer or not you should leave them as long as possible and then sacrifice them. He said it was also important to have a set of controls to sacrifice at the same time as the test animals.

Concerning the implantation of talc and asbestos into the same animal Dr Roe thought this to be an unwise procedure and one where the interpretation of the work would be difficult.

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