Tayside University Hospitals

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Terry Lindsay
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Brisbane 4207
Australia

Date 31st July, 2002
Your Ref
Our Ref RABW/NM

Enquiries to Mr. R. A. B. Wood
Extension Secretary 33885
Direct Line
Email

Dear Mr. Or Ms. Lindsay

re: **Fax dated 9th July, 2002 and 29th July, 2002**

Thank you for your fax of the 9th July asking for my comment on gastrograffin aspiration in to the lungs. You may think I am slow, do no other work but I am absolutely phenomenally busy and this would go to the bottom of a pile as it is with medico-legal connotations and I need to be exact and accurate with it and it needs work behind it to make sure I am not giving a wrong opinion.

If you had acute pancreatitis and it is possible the team you were under were trying to show if you had any pancreatic necrosis by placing dilute contrast medium in to your gastro-intestinal tract and intravenously outline all the living gut and living pancreas and leave behind on a CT scan any non-lighting up pancreas which was dead. This was a very sensible thing to do. I however think it is most unlikely that you had 600mls of 2% gastrograffin in your left lower lobe. This would have caused acute pulmonary oedema of the lungs and may well have caused your demise. If the surgeon told you you had gastrograffin placed in to your lungs, it may be that he is incorrect in knowing the exact substance that was actually used as a contrast medium. It is much more likely to have been a water soluble medium and give you a problem but not your death. If they used gastrograffin 2% was this put down a naso-gastric tube so they could get such a large volume in to you. Was the naso-gastric tube actually in your lung.

As commonly used in x-ray departments for this type of CT scan is a very dilute barium solution or 20mls of Niopam in 1 litre of water or gastromiro which is a non-ionic contrast medium.

My own thoughts are you had a different medium put by mistake in to your lungs. You will need your surgeon to actually confirm that you did or not have gastrograffin with the Radiologists.

I am sorry that you had a very severe attack of pancreatitis and that you do not smoke, drink or have gall stones but there are other uncommon causes of pancreatitis which still can cause very severe pancreatitis which you may or may not have. Have all congenital type strictures, pancreadivisum, problems with the ductal system of a pancreas been ruled out.

In conclusion gastrograffin is now rarely used in the upper gastro-intestinal tract because it is so hyperosmolar and drags fluid in to itself from the surrounding tissues that is, if it was in your lungs the alveolar of your lungs causing massive pulmonary oedema from which you would not be able to breath at all. This is truly a very dangerous situation.

Yours sincerely

ROBERT A. B WOOD
CONSULTANT SURGEON

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Mr. T. Lindsay
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Date 26th August, 2002
Your Ref
Our Ref RABW/NM

Enquiries to Mr. R. A. B. Wood
Extension Secretary 33885
Direct Line
Email

Dear Mr. Lindsay

I have read all the reports that you sent me and still must state that gastrograffin being hyperosmola placed in the lungs drags fluid from the body in to the lungs producing massive pulmonary oedema. I have checked all this information with my radiological colleagues and the literature that we work with.

I am not prepared to write anything else to anyone; I do not work with any financial incentives in my life being semi-academic. How many problems you had eventually on the Intensive Care Unit were due to the gastrograffin or the acute pancreatitis cannot be separated.

Yours sincerely

ROBERT A. B WOOD
CONSULTANT SURGEON

Dear Mr. Lindsay

re: **Fax dated 27th November, 2002**

I am sorry that you did not provide me with the full information originally which you have now provided in the amount of fluid and it's concentration of gastrograffin down the trachea in to the lungs.

The osmolality of gastrograffin is 2150mosmol/l, it is approximately 7 times that of normal serum and this put neat down in to the trachea causes massive pulmonary oedema by hyperosmolality of this product drawing fluid out of the body in to the lungs. Diluted at 2% gastrograffin solution now becomes hypotonic with a serum which is 280mosmol/l osmolality. In this state the gastrograffin consists of sodium ditrizoate and meglumina ditrizoate and iodine in the neat form about 700g/l of solute in the gastrograffin. These products would therefore in a dilute solution be drawn in to the lungs and cause a chemical pneumonitis rather than pulmonary oedema. Thus this would be slower in action that in the immediate response of pulmonary oedema due to hypertonicity would nevertheless cause lung problems. 400mls of fluid which accompanied it would in fact be drawn in to the body, thus causing your survival which we can all be grateful for. I think this is why you survived. I did not realise it was only 2% concentration of gastrograffin that was used.

Yours sincerely

ROBERT A. B WOOD
CONSULTANT SURGEON

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Chairperson, Professor Jim McGoldrick
Chief Executive, Mr Gerry Marr
Tayside NHS Board is the common name of Tayside Health Board