Iatrogenic complications: what are doctors' and hospitals' responsibilities?

Ratna Magotra, commentary by F D Dastur

Two close relatives suffered serious complications related to treatment while in the hospital, in a short span of a few months. The case reports are reproduced to initiate a dialogue amongst professionals as to what treating physicians' responsibilities should be when faced with serious iatrogenic complications in patients.

The first patient, a 69-year-old man, was a known case of hypertrophic cardiomyopathy with peripheral vascular disease. He was advised peripheral angiography for claudication, after the Doppler examination revealed severe ischaemia of both lower limbs. The investigations were to evaluate if the less invasive angioplasty was feasible, as any open procedure would have involved considerable risk. This was scheduled as a day procedure at a leading private hospital in Mumbai. His wife and nephew accompanied him to the hospital and waited while the procedure was in progress.

Some time during the procedure he developed severe anaphylactic reaction to the dye and severe hypotension followed by cardiac arrest. He was resuscitated, shifted to the ICCU and kept on a ventilator. All this time, his wife and nephew, who had been waiting outside the theatre since the morning, had no idea what had happened in the angiography suite. What had been described as a '20-minute procedure' had taken a few hours, and their inquiries were brushed away.

Meanwhile I had made a routine telephonic inquiry to find out if the procedure had been completed. The answer I received was vague and did not convey the seriousness of the situation. I asked my senior resident to rush to the hospital and followed him there.

It was only after we arrived that the patient's family was informed about his serious condition, and that too by my resident and myself. Once in the ICCU, the attending cardiologists and ICCU staff gave him excellent care. He responded well to the life support measures and recovered. However, the ischemia of the lower limbs had worsened as a result of severe vasoconstriction with the adrenalin infusion and the limbs were greatly discoloured and cold. (He eventually succumbed to gangrene after a few months.)

By the time the patient had recovered the hospital bill was Rs.67,000. The original day procedure was to cost only Rs. 8,000. What surprised me most was that the bill included the professional charges of the angiographer and his assistant, neither of whom had even expressed regret for the unfortunate complication; in fact they did not interact with the family at all.

The second patient, also male 55, had serious brain haemorrhage following a ruptured intracranial aneurysm. He was successfully operated upon at a public hospital and was making fair progress. However, around three weeks after surgery, there was a dip in his consciousness level and he developed metabolic problems with severe hyponatremia; he was also running a low grade fever and had increased secretions requiring frequent suction through the tracheostomy.

The patient needed close observation and intensive nursing care not possible in a private room of a public hospital with overworked staff. He was transferred to a private hospital in south Mumbai and kept in the ICCU for 'observation for a few days'. When I saw him next morning, he had stable haemodynamics and was comfortable with no change in his condition. Treatment for hyponatremia had been started and all other investigations ordered.

I then proceeded to the operation theatre, where a friend was undergoing surgery, only to be summoned back urgently to the ICCU. I could not believe what I saw on reaching there. The patient had massive surgical emphysema all over his face, neck and chest; he had been put on a ventilator that made it even more difficult for him to breathe and he was almost gasping. He was severely hypoxic with a heart rate of over 180/min and the ventilator had only made it worse since there was bilateral tension pneumothorax. Emergency insertion of the ICD on both sides rapidly relieved him of the pneumothorax and corrected the blood gases. He remained on the ventilator for the next few days and gradually stabilised. This was followed by a high fever although he was receiving the high end of antibiotics. While undergoing a number of sophisticated tests, he was found to have malaria with a high index of falciparum parasite. This had followed a blood transfusion (he had tested negative for malarial parasite on admission). In short, all this prolonged his stay in the ICCU by several days. The ICU bills were mind boggling with repeated portable x-rays, blood gas and electrolyte analysis, and other laboratory investigations constituting a good bit of the added costs.

The doctors and nurses in this hospital were extremely co-operative and caring. The care was excellent and there was no bitterness because of a quiet empathy although no one admitted the unfortunate mismanagement of tracheostomy that had resulted in the life-threatening situation. The family remains extremely grateful to the hospital doctors, nurses and the other staff for their care and persistence.

It is widely accepted that around 30 percent of all serious illnesses are caused as a direct result of some intervention or treatment administered within the hospital setting. These are also known as iatrogenic complications. The word iatera means 'therapeutics' and iatrogenic means 'resulting from an attitude or action of a physician'. Iatrogenic complications can range from mild discomfort to serious complications prolonging one's stay in the ICU or hospital, with added costs to the patient and/or health care delivery systems. They can sometimes be life-threatening.

Most doctors treat their patients with deep respect for the ethical principles of maximum beneficence and non-

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maleficence. It is also true that more complex diseases are being treated in hospitals today than ever before. The wide availability of technological interventions and of newer and more effective molecules can successfully treat many hitherto untreatable diseases. This complexity in the treatment necessarily means an increase in iatrogenic complications. But doctors seem so unprepared to acknowledge these, at least to the public. Most physicians with not so dormant consciences will acknowledge that such complications have taken place in their practice. They usually discuss with their peers even as they manage these complications by instituting further intensive treatment modalities including further surgeries.

There have not been many discussions to ascertain what should be the responsibilities of treating doctors and hospitals in cases of serious iatrogenic complications. Should they inform the family of such complications? Should they charge the patients for services rendered when the primary treatment itself is responsible for the acute illness of the patient? How would the family react if made privy to such information? Some hospitals and doctors have been known to reduce heavy bills or even waive them altogether, but this is rare, and usually happens if the patient dies or the family has become destitute. Waiving the bill is passed off as an act of philanthropy, though it may also be done to ward off medico-legal problems.

More often than not, the patient and the family does not know that the prolonged stay in the hospital or ICU, at a substantial expense and serious threat to life, was a result of the treatment itself. The patient and family can only be grateful to the doctors for their painstaking efforts if the patient survives and blame destiny in case of serious loss of limb or life. Very few doctors or hospital staff would volunteer such information unless there are personal scores to be settled. Most would take a defensive stance if questioned.

It is important that a distinction be made from the known or unknown side effects of a treatment, such as pain or inflammation after surgery, or nausea, headache, and loss of appetite. Treating physicians are aware of the serious side effects of some chemicals on the blood or renal chemistry or on other organs, and exercise restraint while prescribing these drugs to patients. Iatrogenic complications must also be distinguished from 'medical negligence'; the latter denotes a neglectful act on the treating physician's part.

From personal experieces I can only say physicians must be more humane in such situations and do everything possible to ease the suffering of patients and their families. The least they can do is to empathise with them and share something which was beyond their control. One can never put a value on human emotions but a genuine expression of sympathy and a sincere apology can do wonders for injured spirits.

Lastly doctors must desist from misplaced adventurous treatments which put patients through complex and risky procedures when simpler options are available. Hospital administrations need an honest interaction with physicians and officials in the interest of patients.

Commentary

The past 30 years of my career have been spent in a public teaching hospital and later in a tertiary care institution in the private sector. During this period I have seen the practice of medicine constantly changing but fortunately the qualities of a good doctor are still the same. Care (good, professional care), concern, and compassion are still what patients seek.

Escalating medical costs meanwhile are such that today a serious illness can bankrupt a middle-class family. Increasing the number of medically insured persons is the only way to avoid such disasters.

Medical advances are increasingly linked to improved or new technologies. An off-shoot is that we face an increase in iatrogenic complications in hospital practice.

Each of the above points has relevance to the two narrated cases.

In the first case, the patient suffered a reaction to contrast dye used for angiography which is known to cause serious reactions in rare cases (1:50,000). Reactions are idiosyncratic and not dose related. A test dose does not reliably predict complications and is not routinely performed. Non ionic contrast dye is safer but more expensive.

The doctors who performed the procedure did not themselves inform the relatives of the patient's condition and thus showed lack of concern and compassion. Levying their angiography charges was perhaps their right but added insult to injury.

The hospital charges of Rs. 67,000 were justifiable presuming the patient signed the patient consent form prior to angiography. This states that serious complications can on occasion occur. After it happened the hospital provided the best available care to the patient.

In the second case, we are not told how long the tracheostomy tube was *in situ* but it may have been weeks. Changing of the tube or its removal during tracheal toilet with subsequent wrong placement on re-introduction may have led to surgical emphysema and to the succeeding events. Mismanagement can certainly be claimed but there does not seem to have been any negligence.

The development of malaria following blood transfusion reflects badly on the hospital blood bank. In defense it should be said that screening for malaria by examining blood slides is arduous and less precise than serological testing as done for hepatitis and HIV. Nevertheless it is a serious lapse and the certificate granted to the blood bank should be reviewed. The patient meanwhile developed malaria and suffered considerable, morbidity and a prolonged stay in the ICU at considerable expense. The hospital should waive part of the medical bill to show it accepts part responsibility and to avoid possible litigation in the matter.

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