

CME Article

Legal issues in the management of patients with diabetes mellitus

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INTRODUCTION

The prevalence of diabetes mellitus is of global concern. By 2030, it is projected that there will be 366 million people with diabetes mellitus worldwide.⁽¹⁾ In Singapore, the prevalence, according to the 2004 National Health Survey, is 8.2%.⁽²⁾ It should not be difficult to imagine practically all clinicians from every field having some contact with patients with diabetes mellitus at one time or another in their professional lifetime.

Optimal diabetic care requires patient motivation and commitment in partnership with timely and skilful intervention by healthcare providers. Complications resulting from poorly-controlled diabetes mellitus are legion.⁽³⁻⁵⁾ Retinopathy, neuropathy and even advanced chronic renal failure are seen, sometimes soon after presentation for treatment. Diabetes mellitus is also considered a cardiovascular risk equivalent.^(6,7) When can the doctor be held legally accountable for the harm that arises from poorly-controlled diabetes mellitus?

ELEMENTS OF A LEGAL CLAIM

A tort is an injury resulting from a civil or private wrong. Such injuries include those of a physical and personal nature, economic loss and damage to property. Negligence is considered the preeminent tort on which claims are litigated.⁽⁸⁾ In order to succeed, claimants in medical malpractice claims, like other tort claims in negligence, must establish a duty of care owed by the defendant to the claimant, a breach of that duty and harm resulting from the breach of that duty. All elements must be successfully proven.

DUTY OF CARE

Establishing a duty of care is usually not in dispute for the patient-claimant in the traditional patient-doctor relationship. However, it is possible for litigation to arise between a doctor and a claimant outside of this therapeutic relationship. A duty of care will be successfully proven if the damage was foreseeable, and if the relationship between the litigating parties was sufficiently proximate, and if it was considered fair, just and reasonable to impose a duty of a given scope upon the one party for the benefit of the other.⁽⁹⁾ The Singapore case of *Spandek* in the Court of Appeal further took the bold step of unifying all areas of

negligence in psychiatric harm, economic loss or physical harm under one legal test criterion.⁽¹⁰⁾

Example 1

Mr. A, a taxi driver, was noted to have type 2 diabetes mellitus. His HbA1c had deteriorated from 7.5% to 9% over the past year. He was started on insulin and was able to achieve better control. However, he developed a severe hypoglycaemic episode and was involved in an accident in which a pedestrian was paralysed as a result. The pedestrian, advised by his lawyer, decided to claim against the taxi driver as well as the doctor as a co-defendant.

While perhaps it is trite law that no legal duty arises to prevent a person from harm to a third party, exceptions to this have been recognised.⁽¹¹⁾ Thus, the courts have been willing to extend this duty of care on the basis of the presence of physical injuries, to third parties who are harmed and who may never have met the doctor before. In this case, the relationship between the doctor and the pedestrian injured by the hypoglycaemic driver, like in the case of *McKenzie*, whose pedestrian was harmed by the driver whose driving impairment was due to the side effects of prazosin, of which the driver was not warned, would be deemed sufficiently proximate for a duty to arise.

Example 2

A retired doctor, Dr. B, was invited frequently as a speaker in a local community centre to give health talks. In one such health talk, he told the audience that insulin therapy was dangerous and might result in patients having low blood sugar. In his talk, he recounted a particularly bad experience of one of his patients, who developed a stroke soon after initiation of insulin therapy by the hospital. He did not generally encourage insulin therapy.

A member in the audience, Mrs. C, was seen studiously taking notes. She was a 60-year-old with a 15-year history of progressively-worsening type 2 diabetes mellitus and who had been offered insulin injections by her own general practitioner. Bolstered by what she heard at the talk, she continued to resist the idea of insulin to control her blood glucose. She went into a hyperosmolar hyperglycaemic state, resulting in a near brush with death. She decided to sue Dr. B because of physical harm as a result of his negligent advice given at the lecture.

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Mortality rates in hyperosmolar hyperglycaemic crisis can be as high as 11%.⁽¹²⁾ Besides the issue of whether the advice and opinion given in the lecture was sound, the first thing to consider is whether Dr. B owed Mrs. C a duty of care. It could be argued that Dr. B as a professional was one whose advice could foreseeably be intended to be followed by someone in Mrs. C's position. However, whether a proximate relationship ensued is doubtful, since Dr. B was not her personal healthcare provider. On policy grounds, it is also unlikely that a legal duty of care will be found owing to every such participant by the lecturer.

STANDARD OF DUTY OF CARE

In the event of a duty of care having been established, the element of breach must still be satisfied. The *Bolam* test remains good law in deciding whether the legal standard of care in a particular situation is breached.⁽¹³⁾

For some years now, guidelines on clinical management of various subjects have been promulgated.⁽¹⁴⁾ Indeed, the annual guidelines of the American Diabetes Association, published by Diabetes Care, with free online access, come under the heading of 'Standard of Medical Care in Diabetes – Position Statement'.⁽¹⁵⁾ How the courts will respond to them when used by claimants as a sword, demanding of their doctors why they have not been followed, or as a shield, by the defendant doctors, asserting that they have done what is required by the standards, remains to be seen.⁽¹⁶⁾

Example 3

Mrs. E, a 35-year-old single parent with a 5-year history of type 2 diabetes mellitus, had been on regular follow-up at her general practitioner. She did not like the idea of "complicated" care, preferring things to be fuss-free. She liked quick consultations, was reluctant to be on injections, and on occasions would default, preferring to ask her son to purchase medicine for her. Her HbA1c, on past occasions over the preceding four years, was in the range of 10%–11%. She suffered a vitreous haemorrhage in her left eye. Despite treatment, she was left with no useful vision in the eye. She now decided to take action against her doctor for failing to warn her about the seriousness of her diabetes mellitus, which could have been treated more aggressively to avoid the eye complications. She also alleged negligence on the part of the doctor for failing to send her for regular ophthalmological reviews, a requirement as stated in standard of care published by the American Diabetes Association, which her son had helped her access online.⁽¹⁵⁾

The above situation may be more common than realised. For whatever reasons—cost, perceived inconvenience or

lack of time—doctors may at times be guilty of subtle and sympathetic collusion when it comes to avoiding some of the more troublesome options available that might have improved patient care. But this is not going to help when harm results and patients want to seek compensation. Not achieving the optimal HbA1c target of 7% should not mean a legal breach of standard of care, notwithstanding the highly-charged language of the guidelines declaring an HbA1c of 8% or more as unacceptable. The majority of patients have a "suboptimal" HbA1c of between 7.1% and 8%, which may be the best achievable⁽¹⁴⁾ in their circumstances. The National Diabetes Audit carried out in England and incorporating registrations from Wales from the period 2004–2005 indicated that 42% of patients have an HbA1c of more than 7.5%.⁽¹⁷⁾ Targets have to be individualised, agreed upon and explained with an aim for continuous improvement. The sequelae of poor metabolic control would take on a high significance for a relatively young person like Mrs. E. It would appear that a reasonable standard of care would include offering Mrs. E regular eye checks. Proliferative diabetic retinopathy, with the attendant threat of visual loss, occurs in up to 10% of patients with type 2 diabetes mellitus of 15 years duration.⁽¹⁸⁾

Failure to warn and caution may constitute negligence. How is one to fault the merit of the claimant who turns around to say that had she been adequately apprised of the complications of losing her sight, she would have put in more effort and found the resources to fund the more expensive care, and would definitely have found the time to go for regular eye checks? Barriers to insulin injections are common. Would a reasonable standard of care include offering her the more expensive oral options, just to make sure rather than leave it to the intuitive thought that she would be unwilling and unable to pay? The *Bolam* test, also applied recently in a Singapore case,⁽¹⁹⁾ might favour the argument that it is acceptable, and therefore, not negligent practice among doctors not to offer all therapeutic options of care for any particular patient.

However, perhaps lesser known, but no less alive, is the dicta* set by *Bolitho*,⁽²⁰⁾ which suggests that simply because a medical expert declares that what a doctor did was acceptable does not mean that the judge must accept that the doctor was therefore not negligent. Judges must satisfy themselves that the evidence has a logical basis; otherwise, he can reject the expert's view, which supposedly represents a responsible body of medical opinion. The *Bolitho* test is more likely to be used when the medical issue is not complex or technical, but an issue which can be considered by an ordinary person.⁽²¹⁾ Where issues are complex, such as deciding on the

*dicta: The part of a judicial opinion which is merely a judge's editorialising and does not directly address the specifics of the case at bar; extraneous material which is merely informative or explanatory. The Lectric Law Library's Lexicon. Available at: www.lectlaw.com/def/d047.htm.

appropriateness of different methods of treatment, then the *Bolam* test is more likely to be adhered to.

Over the years, the courts have been reluctant to apply the *Bolam* test in all aspects of medical negligence. This is particularly true in the areas of medical advice and giving of necessary information to enable patients to make autonomous decisions. The Australian case of *Rogers*⁽²²⁾ and the more recent Malaysian case of *Foo Fio Na* illustrate this.⁽²³⁾ Hence, it may be important not only from the perspective of best practice, but also from a medicolegal angle, to discuss with the patient the measures (including those related to lifestyle) required to escalate treatment to achieve customised targets, be it for glycaemia, blood pressure, blood lipids or physical activity.

Example 4

A refinery technician, Mr. D, was initiated on insulin treatment because of unsatisfactory control of type 2 diabetes mellitus. He was required to work shift. His meal times could be irregular. He was also required to respond to emergencies in the refinery, work at heights and within confined spaces. During one occasion when he was working at heights, he suffered a hypoglycaemic episode, fell and injured himself. What are the potential legal implications for the doctor?

Offering insulin as a therapeutic option, as part of stepped-up care cannot be faulted. However, it is important and necessary for the doctor to address the issue of hypoglycaemia. The courts are unlikely to find this too onerous a duty for the doctor. Its omission is unlikely to be supported as not unreasonable by medical peers and could potentially form the basis for a breach of standard of care. This is all the more so if we consider the hypoglycaemia to be iatrogenic⁽²⁴⁾ and to be a risk that could be minimised and managed against its potential harm. 11.2% of type 2 diabetics on insulin reported major hypoglycaemia over a six-year follow-up period.⁽²⁵⁾ Hypoglycaemia, if left disregarded, could lead to hypoglycaemia unawareness in the future, resulting in increased danger.

The impact of hypoglycaemia on activities of daily life and work is not often investigated. One exception to this is in the area of driving. One study on diabetes mellitus and driving mishaps revealed that half of type 1 diabetic drivers and three-quarters of type 2 diabetic drivers never had a discussion of hypoglycaemia with their doctors.⁽²⁶⁾ Doctors should be more proactive in this area.

CAUSATION OF HARM TO PATIENT

Finally, a claim can only be successful if the patient can prove, on the balance of probabilities, that the breach of standard of duty of care caused the harm suffered

by the patient. Attributing legal responsibility for the purposes of proving causation would thus range an entire spectrum. At one end is the obese person who refuses to exercise, has a history of poor adherence despite all the health education given, and who also has been offered the maximum in the diabetes pharmacopeia. When harm develops, he can be said to be the chief architect of his own medical misery. A claim would be unlikely and in any case would be easily repelled. At the other extreme is the lean diabetic patient, with good cognitive abilities, insight, motivation and understanding. If indifferent care has been given and complications develop, it might prove difficult for the doctor to disclaim responsibility, and given the circumstances, might be best for the doctor to settle. Cases that are disputed would most likely fall somewhere in between.

Example 5

Mr. F was an obese diabetic patient, aged 35 years. He had a waist circumference of 110 cm and a body mass index of 36 kg/m². His HbA1c on average was about 11%. He was already on insulin, maximum metformin and gliclazide dosing. He then developed diabetic nephropathy (chronic kidney disease [CKD], stage 3) and felt that his care had been negligent, citing as negligence the failure of his doctor to monitor him for albuminuria and failure to prescribe angiotensin-converting enzyme inhibitors (ACEIs) or angiotensin receptor blockers (ARBs) to protect his kidneys, resulting in CKD and in an eminent need of dialysis at his young and tender age.

Unless there are contraindications to its use, ARBs and ACEIs have been widely promoted as anti-hypertensive therapy in diabetes mellitus and also to protect against renal damage. A responsible group of doctors may, however, very well argue that not every case needs be treated with ACEIs or ARBs. In the absence of hypertension, its use may be considered,⁽²⁷⁾ but not using them does not mean negligence. There may be physicians who do not believe it to be necessary, preferring to treat with other classes of drugs for hypertension even if present. That should not make them negligent.

But in the event that the court rules that the failure to check for albuminuria and to treat it accordingly is negligent, the final issue of causation still needs to be resolved. Mr. F will have to prove that the omission of monitoring and treatment of his albuminuria among the plethora of contributing factors, such as excessive protein intake,⁽²⁸⁾ poor metabolic control, poor blood pressure control, lack of physical activities and obesity, remains predominant in causing his CKD. He has the burden of proving that had the albuminuria been managed, more

likely than not, he would not have suffered CKD 3 at this time.

A renal physician was called in as an expert for the defence. Under the intense heat of the trial, she also mentioned that on balance of probabilities, diabetic patients with CKD 3 are more likely to die of cardiovascular disease than to progress to end-stage kidney failure. This was quoted from published studies,⁽²⁹⁾ much to the consternation of the defence who thought an arrow might have been inadvertently presented to the claimant's quiver.

Though the omission to monitor and check for albuminuria is regrettable, it may still be up to the court to conclude that legal causation of the CKD, the subject of the claim, was not proven. However, it might stand the doctor in much better stead if the schedule of complication screening as recommended in clinical practice guidelines are conveyed to the patient and arrangements are made for such recommendations to be adhered to by the patient. Where the patient declines such screening on account of cost or other considerations in spite of persuasion, documentation of such refusal would be prudent.

Example 6

Mr. F continued his treatment with another doctor. He remained stabilised at CKD 3 with a glomerular filtration rate of 35 ml/min. His creatinine levels fluctuated in the range of 150–200 mmol/L. He went overseas for a business trip and came down with a severe bout of diarrhoea. He was hospitalised and developed lactic acidosis. His hospital stay was stormy and his renal status worsened. He now had to be put on dialysis treatment. His physician friend overseas mentioned that lactic acidosis was a known complication for renal failure patients taking metformin. He decided to sue his doctor, citing as negligence the use of metformin in his renal-compromised state that had resulted in lactic acidosis.

Metformin is unarguably the most affordable and widely-prescribed medicine for diabetes mellitus treatment. Over the years, its use for cardiac patients has also been relaxed.⁽³⁰⁾ However, doctors struggle with its use in renal-compromised patients because of the attendant ominous warning it carries. The experience of withdrawing metformin for patients with diabetic kidney disease, in particular from CKD 3, when the increasing insulin resistance may be effectively tamed by metformin, is a well-known dilemma to doctors managing such patients. Metformin-associated lactic acidosis is a dangerous but very rare complication, with an occurrence of 1–5 per 100,000.⁽³¹⁾ Lactic acidosis is also seen among diabetics not on metformin. The benefits of metformin seem to outweigh the small possible risk of contribution to major harm.⁽³²⁾

However, published opinion seems to weigh heavily against the use of metformin despite this. One study used a creatinine cut-off level of 150 mmol/L as the contraindication to its use.⁽³³⁾ Would the considered use of metformin when this level is exceeded, including explanation to the patients, techniques of sick day management and dose modification, help to counter the allegation of negligence? Can a responsible physician persuade the court that notwithstanding the unfortunate harm caused, the use of metformin in such similar cases would still be endorsed by some physicians, and therefore, not necessarily negligent? All cases have to be individually assessed.

A condemnation of its use would have painful implications for the vast number of similarly situated patients who have benefited from metformin. Causation in those rare unpredictable occasional cases may be a certainty in terms of fact, but its use may not necessarily mean negligent conduct, if the caveats have been duly considered and, better still, resulted from a team consensus decision of the doctors involved. This is where the *Bolam* test may be decisive in judging whether the standard of care has been breached.

CONCLUSIONS

Diabetes mellitus is an exemplary model of a chronic disease. It has multiple comorbidities, each with its own target for optimal control. Many patients with diabetes mellitus have to live for many years with the illness. Much is being done by many doctors involved in the support and treatment of diabetic patients. However, sadly for many patients, especially long-term sufferers, complications are a way of life. These may have resulted from the inexorable progression of the disease. For some patients, they may feel that they are victims of negligent care and therefore deserving of some compensation.

The multidimensional nature of these complications also means more possible legal vulnerabilities for the physicians. The cases mentioned are fictional, but the issues are plausible and familiar, illustrating the impact of a chronic illness on work and on the various metabolic complications. Tort law in negligence is really not about punishment. Which normal doctor would set out intentionally to harm his patients? It is about compensation for unintended suffering because of the alleged oversight by the doctor. Unfortunately, until a better system evolves, the adversarial system remains the only way through which compensation can be sought, whether it is by private negotiated settlement or by a public trial. We do not need to go through these to imagine how harrowing they can be.

Doctors need to be aware of the legal pitfalls involved in

such care. Clear documentation is important. They support the existence of statements transpired between doctor and patient. Constraints that impede optimal control must be clearly identified, and documented, as should be evidence of encouraging adherence, explanation of consequences and clinical sequelae. For many practitioners, guidelines intended to help and optimise care may appear to be aspirational at best or discouraging at worst. Nevertheless, it might appear perverse to depart too far from them without fair reasons. Every improvement in HbA1c, together with other morbidity measures, towards the target results in risk reduction in complications. Recognising and managing the constraints to the best of our abilities in a compassionate and sympathetic manner, should also not detract us from the need to protect ourselves against potential legal pitfalls.

Understandably and rightly so, all doctors would be most concerned about issues related to standard of care. It is the least we can do for our own legal protection. The other elements of a tort claim, establishing a duty of care and requiring the claimant to prove causation are partly expedients to discourage frivolous and vexatious suits. It serves the law not to have liability attached to harm that is not proved to be caused by the act in question. The law also feels that one should never be legally liable for harm unless a duty exists. However, few would choose to be guided by the above. Delivering substandard care just because we know that any harm accrued cannot be made out in terms of causation, or because a duty cannot be established, would rob medicine of much of its humanitarian value.

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ADDITIONAL INFORMATION

The following cases illustrate basic principles that are applied in all tort cases whenever fundamental points in law are raised. This is to ensure certainty and consistency in law. This applies, where relevant, without exception to medical law cases as well.

Duty of care

Caparo Industries Ltd plc v. Dickman [1990] 2 AC 605; [1990] 2 WLR 358 [1990] 1 All ER

Caparo orchestrated a successful bid to take over Fidelity, relying on figures prepared for Fidelity's annual audit, which showed a healthy profit. In the end, it was discovered that Fidelity was almost worthless. Caparo tried to sue the auditors (Dickman), but failed in the action.

The accounts were produced for the purpose of compliance with the Companies Act and not for the purpose of guiding investment decisions from which a legal duty can be borne. Thus, the three-stage test developed in this case, viz. foreseeability of harm, proximity of the relationship between the parties and whether it is fair, just and reasonable that the law should impose a duty of a given scope upon the one party for the benefit of the other, determines the scope of duty of care imposed on the defendant in a tort action.

McKenzie v. Hawaii Permanente Medical Group Civ. No. 98-00726 DAE Hawaii Supreme Court June 10, 2002

In the Hawaiian case of McKenzie, it was held that "a physician owes a duty to non patient third parties injured in an automobile accident caused by an adverse reaction to the medication...where the physician has negligently failed to warn the patient that the medication may impair driving ability and where the circumstances are such that the reasonable patient could not have been expected to be aware of the risk without the physician's warning".

Spandek Engineering v. Defence Science Technology Agency (DSTA), [2007] 1 Sing. L.R. 720

Spandek Engineering sued DSTA as the consultants DSTA had employed were negligent and had undervalued the works Spandek Engineering was to carry out for DSTA, causing Spandek Engineering to fail to complete the contract due to "insufficient incentive". The court held that there was no duty to care for the plaintiff and laid down the universal test for duty of care in all negligence cases, regardless of whether it is psychiatric harm, economic loss, or simply physical harm. This is based on the two-stage tests of proximity of the relationship between contending parties and policy considerations. Previously, different tests were applied depending on the nature of the loss.

Foreseeability is a matter for preliminary factual enquiry and will no longer be included as part of the legal test.

Standard of care

Bolam v. Friern Hospital Management Committee [1957] 2 ALLER118

Bolam involved a claimant patient who underwent electroconvulsive therapy and suffered fractures as a result. Were the doctors liable for failing to administer muscle relaxants, a practice not uniformly adopted by all responsible doctors? "A doctor is not guilty of negligence if he has acted in accordance with a practice accepted as proper by a responsible body of medical men skilled in that particular art". The claim therefore failed.

Dr Khoo James and Another v. Gunapathy d/o Muniandy and another appeal [2002] 2 SLR 414; [2002] SG Court of Appeal 25

This is a case of a 36-year-old woman left with significant neurological deficits after radiosurgery for a lesion that was thought to be a recurrent brain tumour. There was alleged misdiagnosis and negligence in treatment. Both parties in litigation amassed a stellar cast of expert witnesses to argue their positions. A notable statement in the judgment reads: "We often enough tell doctors not to play god; it seems only fair that, similarly, judges and lawyers should not play at being doctors" Yong Pung How CJ (delivering the grounds of judgment of the court), on how the courts should not prefer its judgment on medical matters over those of experts.

Standard of care, causation between breach and harm suffered

Bolitho v. City and Hackney Health Authority [1997] 4 All ER 771

The facts in this case demonstrate the difficulty of causation. A child had breathing difficulty, but by the time the paediatrician attended to the child, it was too late. The claimants alleged that had the paediatrician responded in a timely manner and intubated the patient, the injuries would have been averted.

Briefly, the House of Lords held legal causation between negligence and harm not to be established because there was evidence that intubation on a child so young carried serious risks, and therefore the paediatrician would not have used it and it would not have been negligent for her to make that decision.

However, this case, remarkable as it was for establishing principles determining causation, is also well known for the remarks of Lord Browne-Wilkinson—"the Court is not bound to hold that a defendant escapes liability

just because he leads evidence from a number of medical experts... the Court has to be satisfied that the exponents of the body of opinion relied on can demonstrate that such opinion has a logical basis"—that influence the thinking of what constitutes a reasonable standard of care.

To some, it represented an attempt by the court to prevent the jettisoning of a legal outcome by the opinions of the medical expert. Thus in a way, it tried to restrain the power of *Bolam*.

Rogers v. Whitaker [1992] 175 CLR 479

In the Australian case of Rogers, the surgeon operated on Mr Whitaker's right eye, which was blind to start off with. The operation was not successful. He further developed the rather rare complication of sympathetic ophthalmia on the otherwise normal left eye, the result of which he was left with no useful vision. Failing to warn was considered negligent. The court declined to follow the *Bolam* defence, which was that it was accepted practice among eye surgeons

not to have warned patients about the rare complication. Particularly in the field of non-disclosure of risk and the provision of advice and information, "it is for the courts to adjudicate on what is the appropriate standard of care after giving weight to the paramount consideration that a person is entitled to make his own decisions about his life".

Foo Fio Na v. Dr Soo Fook Mun & Anor Federal Court, Putrajaya [Civil Appeal No: 02-20-2001(W)] 29 December 2006 Judgment

Ms Foo, described by the court as a bright young lady, sustained a neck injury in a road traffic accident. Subsequent treatment, which included two surgeries, was unsuccessful. She became paralysed. The case was disputed from the trial court to the Court of Appeal and finally to the Federal Court. The Federal Court held that the *Bolam* test has no relevance to the duty and standard of care of a medical practitioner in providing advice to a patient on the inherent and material risks of the proposed treatment.

SINGAPORE MEDICAL COUNCIL CATEGORY 3B CME PROGRAMME
Multiple Choice Questions (Code SMJ 200912B)

- | | True | False |
|---|--------------------------|--------------------------|
| Question 1. A patient decides to claim against the doctor for negligence. In order for the medicolegal claim to succeed, the patient: | | |
| (a) Must show that the doctor owes him a duty of care. | <input type="checkbox"/> | <input type="checkbox"/> |
| (b) Must show that there was a breach in the standard of care. | <input type="checkbox"/> | <input type="checkbox"/> |
| (c) Need not show that there was harm, as long as what the doctor did was below the standard of care normally given by a responsible body of medical peers. | <input type="checkbox"/> | <input type="checkbox"/> |
| (d) Must show that the harm he suffered was caused by the breach in the standard of care. | <input type="checkbox"/> | <input type="checkbox"/> |
| Question 2. A worker on insulin treatment for diabetes mellitus suffered a serious hypoglycaemic attack as a result of which a colleague was seriously injured. The injured colleague decides to take action against the doctor who treated the worker with insulin. | | |
| (a) It is not possible because the doctor does not owe the injured colleague a duty of care, as the injured colleague was never his patient. | <input type="checkbox"/> | <input type="checkbox"/> |
| (b) The doctor has a duty to warn the worker about the risks of hypoglycaemia associated with his treatment. | <input type="checkbox"/> | <input type="checkbox"/> |
| (c) Workers in risky jobs should never be treated with insulin because of hypoglycaemia risks. | <input type="checkbox"/> | <input type="checkbox"/> |
| (d) Hypoglycaemia, if not treated properly, can lead to hypoglycaemic unawareness, which is an added danger. | <input type="checkbox"/> | <input type="checkbox"/> |
| Question 3. Your patient is always complaining about the cost of medication. You have documented this in your notes. Her diabetes mellitus is not well controlled. There are certain options you are thinking of discussing and offering to her but you have not done so because of her complaints about cost. Complications develop. She decides to claim against you for not improving on her care, and for using the same old medicine for years. | | |
| (a) You are protected against the negligence claim because you know of many other doctors who would have done the same under the situation. | <input type="checkbox"/> | <input type="checkbox"/> |
| (b) The <i>Bolam</i> test would apply, so you need not worry about the claim. | <input type="checkbox"/> | <input type="checkbox"/> |
| (c) You have a duty to give the necessary information to the patient to help her make an informed choice on the treatment. | <input type="checkbox"/> | <input type="checkbox"/> |
| (d) For the claim to succeed, she still has to prove that the complications she now suffers is caused by your care, which she alleges is negligent. | <input type="checkbox"/> | <input type="checkbox"/> |
| Question 4. You have been treating your diabetic patient with metformin. She has deteriorating renal function. You have explained to her about this. Her creatinine level has increased to 160 mmol/L in the last three months, and you have reduced her metformin dosage from 1,700 mg per day to 500 mg per day. Unfortunately, she develops lactic acidosis. | | |
| (a) What you have done may not be necessarily negligent if you have consulted your colleagues, representing a responsible body of medical opinion, who recognise that under those circumstances, the use of metformin is justified. | <input type="checkbox"/> | <input type="checkbox"/> |
| (b) Lactic acidosis is also known to have occurred among diabetic patients not taking metformin. | <input type="checkbox"/> | <input type="checkbox"/> |
| (c) The benefits outweigh the risk, so it is alright in all cases to give metformin. | <input type="checkbox"/> | <input type="checkbox"/> |
| (d) Cases have to be individually assessed and evaluated for the risks and benefits. | <input type="checkbox"/> | <input type="checkbox"/> |
| Question 5. Diabetes mellitus is a multidimensional disease. It can result in serious complications. | | |
| (a) HbA1c of more than 9% must mean negligent care by the doctor. | <input type="checkbox"/> | <input type="checkbox"/> |
| (b) Regular monitoring of complications must be offered to patients. | <input type="checkbox"/> | <input type="checkbox"/> |
| (c) Therapeutic options must be explained and offered. | <input type="checkbox"/> | <input type="checkbox"/> |
| (d) The failure to warn and advise the patient about retinopathy can lead to visual loss. Potentially, this can be a basis for a negligence claim against the doctor. | <input type="checkbox"/> | <input type="checkbox"/> |

Doctor's particulars:

Name in full: _____

MCR number: _____ Specialty: _____

Email address: _____

SUBMISSION INSTRUCTIONS:

(1) Log on at the SMJ website: <http://www.sma.org.sg/cme/smj> and select the appropriate set of questions. (2) Select your answers and provide your name, email address and MCR number. Click on "Submit answers" to submit.

RESULTS:

(1) Answers will be published in the SMJ February 2010 issue. (2) The MCR numbers of successful candidates will be posted online at www.sma.org.sg/cme/smj by 1 March 2010. (3) All online submissions will receive an automatic email acknowledgment. (4) Passing mark is 60%. No mark will be deducted for incorrect answers. (5) The SMJ editorial office will submit the list of successful candidates to the Singapore Medical Council.

Deadline for submission: (December 2009 SMJ 3B CME programme): 12 noon, 22 February 2010.