THE LIABILITY OF DENTISTS IN THE PROVISION OF DENTAL MATERIALS

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Dental practitioners are thought to be subject to the same principles in relation to the tort of negligence as are medical practitioners. However, in addition to their common law liability, dental practitioners may be more vulnerable to strict liability under the Sale of Goods Ordinance because, unlike medical practitioners, provision of materials is a large part of dental practice. The classification of the provision of dental materials to patients can affect the potential liability of dentists, ie whether there is a contract for the supply of goods, for the supply of services, or something else. This article explores the implications of the Sale of Goods Ordinance and the impact of reforms recently recommended by the Law Reform Commission of Hong Kong on dental practitioners in Hong Kong.

Introduction

It has been suggested that dental practitioners are subject to the same principles in relation to the tort of negligence as are their medical colleagues.[1] However, in addition to common law liabilities, dentists may be more vulnerable to being held strictly liable in the course of providing dental materials to patients. This is due to the much higher frequency of materials handling and provision by dentists in their general and specialty practices than by other medical practitioners.

When dentures are made for a private, fee-paying patient, the transaction may be considered a contract for the sale of goods. Therefore, when the dentures are transferred to the patient, there is an implied condition or warranty as to their quality and fitness for their intended purpose (the warranty). This was decided in *Lee v Griffin*[2] and accepted by Du Parcq LJ in *Samuels v Davis*.[3] However, such warranty will apply only when a substantial part of the contract is for the actual sale of the dentures. It should not apply to work done by the dentist, or when the supply of materials is incidental to the dental service.

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1 A Dugdale, ed, *Clerk & Lindsell on Torts* (London: Sweet & Maxwell, 2000) 18th edn, s 8–60, p 476.
2 [1861] 30 LJ QB 252.
3 [1943] 1 KB 526.

Davies has argued that it is unlikely that *Lee v Griffin*[4] would be followed today because it implies that the skill of a dentist in producing dentures is insignificant.[5] The specialist training and qualifications in the modern dental context supports Davies' position, even though this argument may in fact weaken the protection available to the patient. According to this view, the warranty implied for the contract for sale of goods under the Sale of Goods Ordinance[6] (SOGO) should not apply to the provision of dentures. Yet the Law Reform Commission of Hong Kong (LRCHK) recommended in its December 2000 Consultation Paper that the warranty implied under the present SOGO should extend to all types of transfer of property in goods.

This article considers the legal implications of the transfer of property in dental materials from a dentist to a patient under the present laws of Hong Kong, and the amendments recommended by the LRCHK.

Negligence and Strict Liability

Lord Diplock in *Sidaway v Bethlem Royal Hospital*[7] stressed that the *Bolam* test[8] should apply to every aspect of the duty of care owed by a doctor to his or her patient in the exercise of the doctor's healing functions. This test of negligence under common law also applies to dentistry. The *Bolam* test consists of two parts.[9] Firstly, the standard is that of the ordinary skilled person exercising and professing to have the special skill. In other words, the standard of a doctor who professes to exercise a special skill must exercise the normal skill of his or her speciality, bearing in mind that a general practitioner is not expected to meet the standard of a specialist.[10] Secondly, in determining the required standard of care, reference is made to the opinion of a responsible body of medical opinion. If there is a body of opinion in support of the defendant practitioner, it is likely that he or she will not be held negligent,[11] irrespective of the manifest failure of a treatment.

When a defective material or product is implanted into the body of a patient, an additional liability may arise in that there is effectively a sale of the defective product to the patient; that is, strict liability may apply to the doctor under the SOGO. However, the provision of materials or goods by a general medical practitioner is normally only a relatively small part of the treatment in comparison with that of a general dental practitioner.

4 Note 2 above.
5 Iwan Davies, *Sale and Supply of Goods* (London: Pearson Professional Limited, 1996) 2nd edn.
6 Cap 26, Laws of Hong Kong.
7 [1985] A.C. 871.
8 *Bolam v Friern Hospital Management Committee* [1957] 1 WLR 582.
9 A. Dugdale (ed), *Clerk & Lindsell on Torts* (London: Sweet & Maxwell, 2000) 18th edn, s 8–35, p 463.
10 *Maynard v West Midlands R.H.A.* [1984] 1 WLR 634.
11 *See* n 9 above.

Dental Materials

The work of a dentist in dealing with materials is similar to that of civil engineers dealing with building materials, electronic engineers dealing with electronic components, and mechanical engineers dealing with mechanical parts and materials. A dentist is expected to make use of specialist knowledge of the materials employed, that is, the materials science of the products he or she uses, to engineer or apply devices (in the broadest sense) to serve the purpose of the treatment. This includes direct restorations, for example of dental amalgam (that is, fabricated *in situ*); indirect restorations such as crowns, inlays, bridges and prostheses (dentures), including implants used to support prosthetic devices; and treatment apparatus such as is used in orthodontics.[12]

Except for direct restorations, a portion of the process of production of devices may be carried out by a dental laboratory. For example, a dentist may take an impression of the mouth of the patient and send this, with instructions, to a dental laboratory for the production of a dental crown. While a dentist may therefore have contracted out a portion of the work, he or she nevertheless remains the person responsible for the specification, instruction for the production and the fitting of the crown as far as the patient is concerned. This is irrespective of any general duty of care that the dental technician owes to the patient.[13]

There are two aspects to the use of materials in dental treatment: rehabilitation and service. Rehabilitation has to do with the efficacy of a device in restoring form and function, and thus is a "quality of life" determinant. Bad design, incorrect selection of materials, structural faults, poor finish and poor or faulty installation are some areas where the dentist as fabricator can provide treatment that falls short of being efficacious or functional as part of the rehabilitative process.

Service refers to performance over time, in the sense of deterioration of any characteristic such as wear, fracture, discolouration, corrosion, dissolution or distortion. These processes of degradation are in fact ordinarily related to precisely the same set of factors relevant to preparation and manufacture, as is the immediate functionality, and thus the responsibility again falls to the dentist.

There is more to this than simply failure to deliver as expected. The patient can be harmed in various ways related to defects in delivery. Some of these are more obvious than others, for example loss of bone, face shape change,

[12] Orthodontics is the treatment and prevention of irregularities in the arrangement of teeth.

[13] *Donoghue v Stevenson*, [1932] AC 562. The case laid down the principle of liability for unintended harm in the aspect of the duty of care, eg a careless manufacturer of a dangerous defective product is liable to a consumer to whom it causes personal injury.

nickel sensitivity, infection, fractured teeth, speech impairment, and loss of self-esteem. In the long term, deterioration of the dental condition of the patient may be attributed to the failure of the dentist to attain the highest standard of treatment, one of the consequences of which is the necessity for continued high cost treatment. Although it is recognised that the ageing process itself involves changes over which the dentist has no control, device quality or fitness for purpose presumably implies that changes caused by ageing are not accelerated by the device.

Legislation

Section 16 of the SOGO[14] stipulates that there is an implied warranty as to the quality or fitness for a particular purpose of goods supplied under a contract of sale. That is, that the goods supplied under the contract are of merchantable quality or, if the goods sold are for a particular purpose, that they are reasonably fit for that purpose. Therefore, a dentist will be held liable if the implied warranty is breached.

However, there is a problem in applying the SOGO to a situation where monetary consideration is absent. The SOGO only applies when there is a contract of sale of goods whereby the seller transfers or agrees to transfer the property in goods to the buyer for a monetary consideration.[15] Section 16 of the SOGO provides that the implied warranty for any particular goods supplied applies to the circumstance of sale only.[16] In other words, when a sale as such does not exist, the SOGO does not apply. This is relevant to free dental services supplied through government or voluntary organisations. Thus, there appears to be an anomaly in that the beneficial receiver of such services, the patient, is not protected in law against poor treatment or faulty devices when these are free of charge. Further, it is often precisely that group of patients who is least able to pursue redress through the law.

If the contract for the supply of materials as part of a treatment by a dentist is considered to be a contract for the supply of work and materials, or purely a contract for the supply of services, then only the service element of such contracts would be statutorily governed under the Supply of Services

[14] Sale of Goods Ordinance, s 16(1): "This section provides ... there is any implied condition or warranty as to the quality or fitness for any particular purpose of goods supplied under a contract of sale"; s 16(2), "Where the seller sells goods in the course of business, there is an implied condition that the goods supplied under the contract are of merchantable quality"; s 16(3), "Where the seller sells goods in the course of business and the buyer ... makes known to the seller any particular purpose for which the goods are being bought, there is an implied condition that the goods supplied under the contract are reasonably fit for that purpose, whether or not that is a purpose for which such goods are commonly supplied"; s 16(4), "An implied condition or warranty as to quality or fitness for a particular purpose may be annexed to a contract of sale by usage".

[15] Sale of Goods Ordinance, s 3.

[16] *See* n 14 above.

(Implied Terms) Ordinance.[17] This ordinance stipulates that the service supplier should carry out the service with reasonable care, skill, time for performance and consideration. In this case, the SOGO does not apply. In contrast, in the United Kingdom (UK) the Sale and Supply of Goods Act stipulates that the warranty applies to contracts for the transfer of goods.[18] The Supply of Goods and Services Act 1982[19] further provides that the warranty applies to contracts for the transfer of goods whether or not services are also provided or to be provided under the contract.

In Hong Kong, a dentist may also be held to have engaged in unprofessional conduct and, after due process, be disciplined by the Dental Council under the Dentists (Registration and Disciplinary Procedure) Regulations[20] if the dental treatment was performed in a way that no dental practitioner of reasonable skill, exercising reasonable care, would carry it out. Again, however, the patient has no rights under this process, even if the implied warranty under the SOGO is relevant.

In the UK, the dentist would be strictly liable for any personal injury caused to the patient under the Consumer Protection Act 1987. There is a conceptually similar Consumer Goods Safety Ordinance[21] (the CGSO) in Hong Kong but the CGSO only covers criminal liability, whereas the Consumer Protection Act 1987 covers strict civil liability as well as criminal liability.[22] In Hong Kong, any person supplying, manufacturing or importing into Hong Kong consumer goods which fail to comply with general safety requirements or approved standards may be liable for a term of imprisonment of up to two years and a fine of up to HK$500,000, and HK$1,000 per day for a continuing offence. However, the CGSO does not apply to dentists supplying materials to patients in the course of treatment because the definition of consumer goods in this ordinance has specifically excluded pharmaceutical products.[23] Materials supplied by dentists are considered to be pharmaceutical products under the Pharmacy and Poisons Ordinance,[24] despite the great majority of such materials having no pharmacological purpose whatsoever.

17 Cap 457.
18 Sales and Supply of Goods Act 1994, c 35, s 8.
19 Supply of Goods and Services Act 1982, c 29, s 1.
20 Cap 156A.
21 Cap 456.
22 Jill Cottrell, *The Law Reform Commission Report on Product Liability* [1998] 28 *HKLJ* 282. The paper analysed and summarised the proposal of the Law Reform Commission that placed heavy reliance on the English model, ie the UK Consumer Protection Act 1987.
23 Consumer Goods Safety Ordinance, Cap 456, Schedule: "The following are not consumer goods within the meaning ascribed by section 2 of this Ordinance ... (i) pharmaceutical products, poisons and antibiotics ... (l) any other goods the safety of which is controlled by specific legislation".
24 Cap 138, s 2(1): "'Pharmaceutical product' and 'medicine' mean any substance or mixture of substances manufactured, sold, supplied or offered for sale or supply for use in– (a) the diagnosis, treatment, mitigation, alleviation or prevention of disease or any symptom thereof; (b) the diagnosis, treatment, mitigation, alleviation of any abnormal physical or physiological state or any symptom thereof; (c) altering, modifying, correcting or restoring any organic function, in human beings or in animals."

Patients, in many respects, are equivalent to consumers, but their rights are explicitly excluded by the legislation. This may be another area worthy of examination by the LRCHK. In passing, it may be noted that the issue of importation is relevant in that many dentists in Hong Kong now use dental laboratories outside Hong Kong, in particular in mainland China, for reasons of cost. It is not clear how standards compliance is controlled in this context.

Liability is strict under the SOGO. Were the application of the SOGO to be triggered, as long as the material supplied was not fit for the intended purpose, a dentist would be held liable for selling the product. This is so even if the product was supplied from a source other than the dentist, or the process of production was carried out by the dentist in accordance with the instructions of the supplier, or indeed that the dentist was not in a position to determine the existence of the fault before supply to the patient. "Purpose" here presumably relates to the context of the exact conditions diagnosed for that patient and therefore has implications for the quality and accuracy of that diagnosis: an error of diagnosis may not excuse an error of material selection or prescription.

Sale of Goods, Supply of Work and Materials and Supply of Service: Where Does Dentistry Stand?

Dentists handle, process and transfer to patients a wide range of materials, including orthodontic appliances, restorative materials, prosthetic appliances, implant materials, cements, and so on. Due to factors such as disease conditions, location and exact anatomy, every dental treatment is an individual customised task; there are no off-the-shelf, one size fits all treatments. In most cases, dentists supply materials in the course of providing a service. In other words, it is difficult to decide whether treatment should be classified as a provision of service or a sale of goods. Where such confusion exists, the court usually finds that:

1 where an article is a standard product such as a meal in a restaurant or a pen sold in a stationery shop, the SOGO applies;
2 Where the case is one such as the supply and installation of roof tiles, or where the article is a unique or one-off product such as a portrait from an artist, it is taken as a contract for work and materials;[25] and
3 Where the skill of the transferor is sufficiently important and the materials used are relatively insignificant, it is treated as a pure contract for the sale of services.[26]

[25] *Robinson v Graves* [1935] 1 KB 579.
[26] *Ibid.*

So where does dentistry stand? Superficially, it may seem that tailor-making a denture is similar to the case of a portrait. However, it was suggested in *Lee v Griffin*[27] and by Du Parcq LJ in *Samuels v Davis*[28] that the provision of a denture was a contract for the sale of goods (the latter case also considered applicable the common law position of the existence of the implied warranty of fitness for the purpose for the denture supplied in the contract between the dentist and the patient).[29] This makes one wonder whether the professional skill of the dentist in the preparation of a denture is considered to be so insignificant and insubstantial as to be negligible. It should be borne in mind that almost 60 years have passed since those judgments. No matter what opinion was formerly held of the skill of dentists, the existence of widely available continuing professional education, further specialist training and the many advanced qualifications on offer all suggest that that skill is (or ought to be) now of a higher order.

This creates an interesting situation. If the dentist's skill is considered to be insignificant such that the treatment is a contract for the sale of goods, the dentist will be held strictly liable for the product sold. Conversely, if the dentist's skill is considered to be significant and substantial, or that the work of a dentist is similar to the work of a portrait artist, it is a contract for the supply of work and materials. In this case, the SOGO does not apply and the dentist will not be strictly liable for any defective denture supplied. In other words, even if a denture is demonstrably not fit for the intended purpose, a sufficient defence for the dentist to escape liability is to show that the service provided was carried out with reasonable skill and care, given that the burden of proof always remains with the plaintiff.

The fitness of the denture in fact relies very much upon the skill of the dentist in the early process of taking the impression of the patient's mouth and other measurements; on the skills in the subsequent processes of designing, adjusting and trimming; and in the exercise of judgement in determining whether the device from the laboratory is satisfactory. The work of the dental laboratory therefore only plays one part in the whole manufacturing process of a denture and, whilst this is a skill requiring specialist training itself, it depends on the quality of the impression and other specifications supplied by the dentist.

[27] Note 2 above.

[28] Note 3 above.

[29] Scott LJ in *Samuel v Davis* (n 3 above) said "it is a matter of legal indifference whether the contract was one for the sale of goods or one of service to do work and supply materials. In either case, the contract must necessarily, by reason of the relationship between the parties, and the purpose for which the contract was entered into, import a term that, given reasonable co-operation by the patient, the dentist would achieve reasonable success in his work, or, in other words, that he would produce a denture which could be used by the patient for the purpose of eating and talking in the ordinary way".

However, the law is unclear about the criteria for the test, ie standard production, one-off production, or skill of transferor.[30] The first question is whether one-off production is a definite indicator for the SOGO not to apply. If this is just one of the indications, the second question is how to distinguish between the manufacture of custom goods, where the particulars for each item are supplied by the customer, and the portrait case.[31] In the case of a designer's unique watch design, or clothes sold in a designer's shop, it would seem reasonable for the purchaser to believe that there is protection under the SOGO.

But, applying the test of comparing the significance of skill and the significance of the materials supplied, the SOGO should not apply. A comparison should not be made with customers who buy goods in a shop with labels indicating "hand made", or when they order furniture that is not in stock and thus has to be made to order, or when ordering tailor-made clothing. When a patient requires dentures the most that can be expected of a specification from the patient is the colour of the gold alloy to be used or the affordability of treatment. Despite the desirability of "informed consent" for any procedure, in practice the dentist does all the specifying.

Recommendation of the LRCHK

In its December 2000 Consultation Paper, the LRCHK recommended that implied terms about quality and fitness be extended to cover all types of "transfer of property in goods".[32] It recommended that there should be an implied condition that the goods supplied are of satisfactory quality, the test of which should be the standard of a reasonable person as to whether or not the goods are satisfactory, "quality" meaning fitness for all common purposes or its particular purpose, whichever is more applicable. However, this begs the question of how knowledgeable a patient is expected to be in order to judge that a defect exists. In a specialist area such as dentistry, "common knowledge" and understanding is slight.

30 *See* n 25 above and n 31 below.

31 Geoffrey F. Woodroffe, *Goods and Services – The New Law* (London: Sweet & Maxwell 1982), p 35. The following have been held to be sales: the design and manufacture of a ship's propeller (*Cammell Laird v Manganese Bronze* [1934] AC 402); a restaurant meal (*Lockett v Charles* [1938] 159 LT 547); the compounding of mink food to the buyer's formula (*Ashington Piggeries v Christopher Hill* [1972] AC 441, HL; [1969] 3 All ER 1496, CA); a set of dentures (*Lee v Griffin* (n 2 above), followed by the Court of Appeal in *Samuels v Davis* [1943] (n 3 above) where Scott LJ thought the distinction to be "a matter of legal indifference"). In contrast, work and materials contracts have embraced printing a book (*Clay v Yates* [1856] 1 H & N 73) and painting a portrait (*Robinson v Graves* (n 25 above)).

32 Law Reform Commission of Hong Kong, "Implied Terms to be Included in the Recommended Legislation – Implied Terms about Quality or Fitness", Recommendation 12, Ch 5, in *Contracts For the Supply of Goods: Supply of Goods Sub-committee Consultation Paper* (Law Reform Commission of Hong Kong: 2000), p 97.

In the UK, the supplier's obligations as to the quality of the goods are similar to those of the seller, since the warranty implied under the Supply of Goods and Services Act 1982[33] is the same as that under the Sale of Goods Act 1979.[34] Should Hong Kong adopt the recommendation of the LRCHK, the obligations of supplier and seller in respect of the quality of goods would be similar to those in the UK.

However, such an amendment would have a significant impact on dental practice in Hong Kong. For example, when a dentist carries out a dental resin composite filling for a patient, the usual and limited obligation of the dentist is to ensure that the filling process is performed with reasonable care and skill. But if the law is amended this will cease to be sufficient, because the dentist will then be held liable simply if the filling fails, even if he or she is able to find an expert to vouch for his or her skill and care, and even if it is the raw material that was defective, unbeknownst to the dentist. The dentist can be held liable for all defects because the filling was not reasonably fit for the intended purpose. Fault on the part of the dentist is not the issue. Although the test of "satisfactory quality" might use the standard of a reasonable person as above, the goods are still required to be fit for all their common purposes.[35]

Notwithstanding the ambiguities in the law at present, or the implications of possible changes, for dentists to reduce the risks of being held liable the following points can be made as potentially affecting the discharge of their duty of care and thus their liability:

1 accurate diagnosis and appropriate specifications for treatment remain paramount;
2 knowledge of the science of dental materials is important in designing treatments and specifications;
3 that knowledge should be applied in the process of engineering devices and exercising processes of all kinds;
4 manufacturers' instructions should not be followed without making a professional judgement as to their appropriateness in the context of the details of the job to be done;
5 maintenance of the ability to judge by keeping up to date with scientific knowledge from current research and publications is necessary;
6 no treatment should be performed in the absence of the necessary expertise, knowledge and training; and
7 informed consent from the patient before each treatment is highly desirable.

[33] Sections 1, 4 (*see* n 19 above).
[34] C 54, s 14.
[35] *See* n 32 above.

These issues cannot be investigated here in any detail, and indeed there are certain practical difficulties with some of them. Even so, they point the way to potential defences in the event of a dispute, although if the warranty applies there will be no defence, irrespective of the dentist's efforts and training.

Conclusion

Given that there is a large and increasing number of dental materials which require various handling skills, the potential for materials-related faults in treatment, and thus of legal liability, is great. Some may relate in an obvious way to the context of the supply of work and materials, eg an amalgam filling, and the SOGO does not apply in these cases. However, the rule in the context of implants, dentures, crowns, bridges, etc is not so clear. When a dental product fails due to defects, the dentist can be liable under the SOGO *when his or her contribution to the production process is insignificant*. However, a dentist will not be liable if he or she took part in the manufacturing process and applied his or her professional knowledge, judgement and skill.

At present, it is difficult to determine liability due to the complexity of dental materials, but the present legal situation is far from helpful, ignoring as it seems to do the value of the specialist training of dentists. Expert opinion must be sought for clarification in any litigation in this area. If the amendments recommended by the LRCHK are enacted, the current messy situation will be made more certain, but dentists will then have to pay extra attention to their selection and handling of materials to avoid being held liable for defects and failures. The *Bolam* test may be applicable in actions against medical practitioners, but strict liability under the SOGO or under the recommendations of the LRCHK are separate and additional concerns for dentists. Nevertheless, attention to these matters will not change the fact that the patient appears to be unprotected by the law in certain circumstances, in particular where he or she has no contract. A careful balance needs to be struck to protect the interests of both patients and dentists.