

Survival characteristics of 771 resin-retained bridges provided at a UK dental teaching hospital

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VERIFIABLE CPD PAPER

IN BRIEF

- Reports an analysis of the survival characteristics of resin-retained bridges in a single-centre study at a UK dental teaching hospital.
- Highlights that the design of the restoration and the experience of the operator providing the restoration were significant factors in the survival of the restorations.

Objective To analyse the factors affecting the clinical performance and those influencing the survival of resin-retained bridgework provided at a UK dental teaching hospital between 1994 and 2001. **Design** A prospective analysis of restorations provided at a single centre using case notes with all patients invited for review to corroborate findings. **Setting** Department of Restorative Dentistry, University of Bristol Dental Hospital and School, Bristol, United Kingdom. **Subjects and methods** Between January 1994 and December 2001, data regarding 1,000 consecutive resin-retained bridges provided at Bristol Dental Hospital and School were recorded. Data was available for 805 patients at the time of the study. Following invitation, 621 patients attended for a review appointment. Life table and Kaplan–Meir survival analysis were carried out for all restorations provided. **Results** The five-year and ten-year survival rates estimated by the life-table method are 80.8% (95% confidence interval 78.0–83.6%) and 80.4% (95% confidence interval 77.6–83.2%) respectively. The median survival cannot be estimated for this study as the survival probability remains above 80% even at the longest follow-up. Analysis of clinical variables influencing survival revealed that design of the restoration and experience of the operator providing the restoration were significant factors. Resin-retained bridges made with minimal tooth preparation are shown to be superior in terms of longevity than those for which other types of tooth preparation is made. Patient satisfaction with their treatment was high.

INTRODUCTION

Replacing missing teeth by means of resin-retained bridgework is a conservative approach compared to other potential methods of fixed tooth replacement. There have been a number of studies investigating the longevity of these restorations since their introduction over 30 years ago.^{1,2} It has been shown that they can provide long-term service,^{3–7} patients are satisfied with the results,⁸ and they are an acceptable alternative to conventional bridgework.^{6,9} However, there is little evidence about the survival and clinical performance of significant numbers of resin-retained bridges carried out by a range of operators with differing levels of skill and experience.

The aim of this study was to prospectively assess the clinical performance of resin-retained bridgework for a range of patients with developmental and acquired tooth loss. All levels of staff and including undergraduate students at Bristol Dental Hospital and School provided the restorations.

METHOD

Sample

The patients studied were drawn from those who had received a resin-retained cast bridge in the Department of Restorative Dentistry at Bristol Dental Hospital and School between January 1994 and December 2001. Data were recorded for 1,000 consecutive resin-retained bridges, which were fitted to 805 patients. Only those for whom outcome information could be updated between November 2009 and March 2010 were included in the analysis.

Data was collected at the time of bridge cementation using a pro forma. A variety of information was recorded that was considered to have possible relevance to the survival of the restorations. Data collected included: the age of the patient, the tooth or teeth replaced by the prosthesis, the abutment teeth, grade of operator and initial patient satisfaction with aesthetics and function. Although the

aetiology of tooth loss was not recorded, those patients who received restorations for developmental absence of teeth and who had attended a multidisciplinary clinic were identifiable from case notes.

Ethical approval was sought and provided by the Faculty of Medicine and Dentistry Committee for Ethics (FMDCE), University of Bristol.

A total of 771 bridges were fitted to patients between the ages of 11 and 81 years, and 341 (44%) of the patients were male. The sample included patients who had been referred to the hospital for treatment by their general dental practitioner and also those referred from a multidisciplinary clinic for management of hypodontia. A number of patients received more than one restoration. It was decided that the analysis should be performed by restoration rather than by patient, on the grounds that multiple restorations for the same patient were at different positions and may have been provided at different times. The scope for variations in a number of variables including operator, technique and the biomechanical environment were considered to be as great, as if the restorations had been provided for different patients.

Every effort was made to see all patients between November 2009 and March 2010 for completion of the survey records; patients

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Fig. 1 Resin-retained bridge replacing tooth 45 with the 46 as the abutment unit

Table 1 The number of restorations that failed by each mode

Type of failure	Frequency	Percentage
Dental caries	5	0.6
Debond	129	16.7
Fractured metalwork	3	0.4
Fractured porcelain	14	1.8
Other – aesthetics	1	0.1

who had not returned for routine recall were given appointments specifically for the survey. Where this failed, contact was attempted by telephone, mail or email to patients or their general dental practitioners to ensure that the restorations were either in service at the survey date of 30 March 2010 or was known to have failed at a documented time. Given the characteristics of a city-centre hospital, a number of patients could not be contacted. The time of failure was recorded as the first debond or first date at which porcelain fracture, caries or other mode of failure was noted. Survival time was therefore calculated as the interval between the fit date and the date of failure where this occurred, or the interval between fit date and date of last examination for those that had not failed.

Bridge construction

All bridges were constructed from a nickel-chromium alloy with a minimum thickness of 0.7 mm. All retainers were unperforated and the fit surface abrasive blasted with 50 µm alumina and luted with the chemically adhesive resin Panavia 21 (Karrary Co. Ltd, Osaka, Japan); reformulated versions of the luting cement were used over the period of the study. The majority of bridges were cemented with the opaque variation of the Panavia 21 (Karrary Co. Ltd, Osaka, Japan) luting cement. A clinical example of the extent of the metal framework suggested for a posterior resin-retained bridge is shown in Figure 1.

Collection of data

A recall examination was conducted by one of the authors. The patients were examined

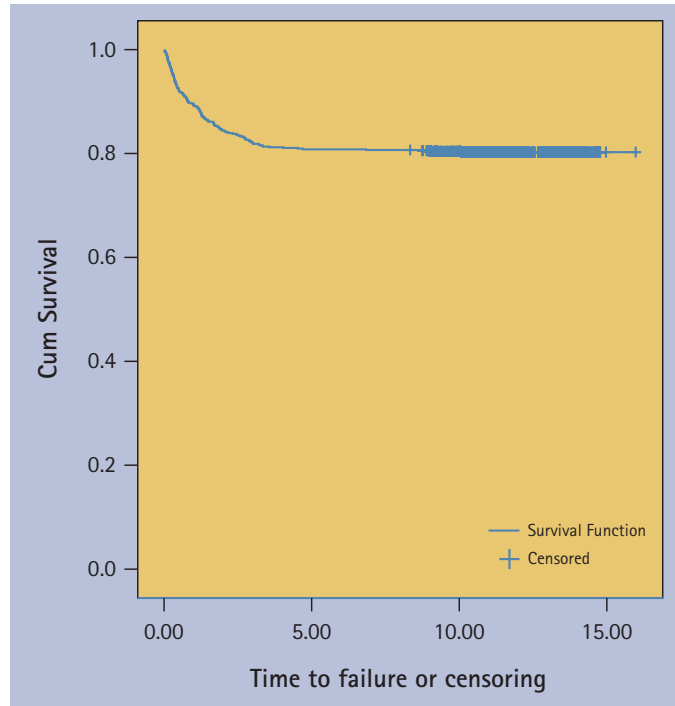


Fig. 2 Kaplan-Meier survival curve for the whole cohort of 771 bridges, 152 of which failed

and the restoration(s) were coded. Collection of the data involved the use of a proforma chart matching a Microsoft Access database and running on a PC.

Each patient was asked to indicate whether or not they were satisfied with the appearance and function of their restoration and any specific areas of dissatisfaction were noted.

The completed database was then subjected to extensive error checks before being transferred to SPSS for statistical analysis.

RESULTS

There were 771 bridges provided for 621 patients for which adequate follow-up information was available. One hundred and fifty-two (19.7%) of the 771 bridges were deemed to have failed during the observation period. As highlighted in the previous section, the time of failure was recorded as the first debond or first date at which porcelain fracture, caries or other mode of failure was noted and required treatment. The numbers of restorations that failed by each reported mode of failure is shown below in Table 1.

For those restorations that were recorded as failed, the significant majority occurred during the first four years after the bridge(s) were fitted, with very few failures thereafter. Figure 2 is a Kaplan-Meier survival plot for the whole cohort of 771 bridges. It shows that nearly 20% of bridges failed within the first four years, but very few failed thereafter, even though more than two-thirds of the bridges were followed up for more than ten years. The latest duration of follow-up at which any failure occurred was at 10.05 years. Among 524 (68.0%) of the 771 bridges with follow-up duration ranging from 10.06 to a maximum

of 15.98 years, no failure occurred. The five-year and ten-year survival rates estimated by the life-table method are 80.8% (95% confidence interval 78.0–83.6%) and 80.4% (95% confidence interval 77.6–83.2%) respectively.

The median survival cannot be estimated for our cohort, as the survival probability remains above 80% even at the longest follow-up. As well as bridge survival, a wide range of characteristics of the patient and the bridge construction were analysed. Tables 2 and 3 show the associations of bridge longevity with several factors that were investigated for possible association with bridge failure.

Figure 3 shows the Kaplan-Meier survival curves for the cantilever and fixed/fixed groups. These curves diverge over the first few years of relatively steep fall and then run virtually parallel and horizontal for the remainder of the follow-up period. Table 3 shows that five-year survival rates for the cantilever and fixed/fixed groups, estimated by the life-table method, are 86.3% and 71.9%.

The hazard ratio for failure of fixed/fixed bridges compared to cantilever designs is estimated as 2.23. The hazard ratio has a 95% confidence interval from 1.62 to 3.07. This is well clear of the null hypothesis value of one, correspondingly the associated p-value is below 0.001.

The other associations in Table 3 are interpreted along similar lines. In each case the Kaplan-Meier plot closely resembles Figure 3, except that the greater the hazard ratio, the wider the separation between the curves.

The next blocks of Table 2 relate to two characteristics of bridge design, cantilever or fixed/fixed construction and whether single

Table 2 Factors significantly associated with longevity of resin-retained bridges

Factor	Group	Failure rate	Five-year survival	Hazard ratio	95% confidence interval	p-value
Age	Under 30	45/328 (13.7%)	0.863	1		
	30 and above	107/443 (24.2%)	0.768	1.84	1.30–2.61	0.001
Date fitted	1998–2001	72/438 (16.4%)	0.843	1		
	1994–1997	80/333 (24.0%)	0.763	1.50	1.09–2.06	0.013
Operator	Staff or postgraduate	47/356 (13.2%)	0.871	1		
	Undergraduate	105/415 (25.3%)	0.754	2.03	1.44–2.86	<0.001
Number of abutments	Single	63/433 (14.5%)	0.859	1		
	Multiple	89/338 (26.3%)	0.743	1.94	1.40–2.67	<0.001
Design	Single abutment cantilever	63/433 (14.5%)	0.859	1		
	Multiple abutment cantilever	4/43 (9.3%)	0.907	0.62	0.23–1.70	
	Fixed/fixed or hybrid	85/295 (28.8%)	0.719	2.15	1.55–2.98	<0.001
Design	Cantilever	67/476 (14.1%)	0.863	1		
	Fixed/fixed	85/295 (28.8%)	0.719	2.23	1.62–3.07	<0.001
Rubber dam used	No	77/484 (15.9%)	0.845	1		
	Yes	75/287 (26.1%)	0.746	1.73	1.26–2.38	0.001
Contacts in excursions – pontics	No	77/481 (16.0%)	0.844	1		
	Yes	75/290 (25.9%)	0.748	1.68	1.22–2.31	0.001
Anterior or posterior	Anterior	92/552 (16.7%)	0.839	1		
	Posterior	60/219 (27.4%)	0.731	1.79	1.29–2.48	<0.001
Preparation of abutments	U	38/357 (10.6%)	0.896	1		
	S	70/224 (31.3%)	0.701	3.30	2.22–4.90	
	O	44/190 (23.2%)	0.768	2.34	1.52–3.62	<0.001
Preparation of abutments	U	38/357 (10.6%)	0.896	1		
	S or O	114/414 (27.5%)	0.732	2.85	1.97–4.11	<0.001
Restorations in abutments	None	109/652 (16.7%)	0.836	1		
	New only	13/54 (24.1%)	0.759	1.50	0.84–2.67	
	Not all new	30/65 (46.2%)	0.569	3.33	2.22–4.99	<0.001
Restorations in abutments	No old	122/706 (17.3%)	0.830	1		
	Any old	30/65 (46.2%)	0.569	3.21	2.15–4.79	<0.001

Table 3 Factors not significantly associated with longevity of resin-retained bridges

Factor	Group	Failure rate	Five-year survival	Hazard ratio	95% confidence interval	p-value
Gender	Male	59/341 (17.3%)	0.833	1		
	Female	93/430 (21.6%)	0.788	1.29	0.93–1.78	0.13
Arch	Upper	114/602 (18.9%)	0.816	1		
	Lower	38/169 (22.5%)	0.781	1.21	0.84–1.75	0.30
Incisal classification	Class I	110/596 (18.5%)	0.819	1		
	Class II Div 1	25/86 (29.1%)	0.733	1.67	1.08–2.58	
	Class II Div 2	7/48 (14.6%)	0.854	0.78	0.36–1.68	
	Class III	10/41 (24.4%)	0.756	1.34	0.70–2.57	0.09
Number of pontics	Single	120/626 (19.2%)	0.813	1		
	Multiple	32/145 (22.1%)	0.786	1.18	0.80–1.74	0.41
Contacts in excursions – abutments	No	52/283 (18.4%)	0.820	1		
	Yes	100/488 (20.5%)	0.801	1.13	0.81–1.57	0.49

or multiple abutment teeth were used. Very few bridges involved more than two abutment teeth – two involved three abutment teeth and two involved four – consequently the number of abutments was dichotomised into single or multiple. These two variables are logically related in that a single-abutment bridge can only be a cantilever. The biggest group comprises 433 single abutment cantilever bridges, of which 63 (14.5%) failed. The fixed/fixed group, including the three hybrids contained 295 bridges, of which 85 (28.8%) failed, a doubled risk relative to the single abutment cantilever group. There were also 43 multiple abutment cantilever bridges, of which only four (9.3%) failed. These include 23 symmetrical double cantilever bridges in which the two upper lateral incisors are replaced and the two central incisors serve as abutments, a design characteristic of Bristol Dental Hospital (Fig. 4) of which 2 (8.7%) failed.

Failure occurred in 75 (26.1%) of 287 cases in which a rubber dam was used intact to cement the restoration(s); in ten (18.5%) of cases in which a modified rubber dam (split dam technique) was used, and in 67 (15.6%) of 430 cases in which it was not recorded that a rubber dam was used. The hazard ratio for bridges in which a rubber dam was used, relative to the remaining ones, was 1.73, with $p = 0.001$.

Presence of contacts in excursions of the pontic was associated with a hazard ratio of 1.68, $p = 0.001$.

As expected, the majority of resin-retained bridges in the cohort involved anterior teeth. In line with the usual terminology, we class incisors and canines as anterior teeth and premolars and molars as posterior teeth. For the 626 bridges replacing single pontics, this rule straightforwardly classes 429 as anterior, 197 as posterior. Only three of the 145 bridges replacing multiple pontics involved both a canine and the adjoining first premolar; these were classed as anterior, resulting in 123 anterior and 22 posterior multiple-pontic bridges. Of the 219 posterior bridges, 60 (27.4%) failed, leading to a hazard ratio of 1.79 ($p < 0.001$) relative to the 552 anterior bridges.

The remaining sections of Table 2 relate to two aspects of abutment teeth, the degree of preparation used and whether restorations were present beneath the metal work. As noted above, nearly half the bridges involved multiple abutments consequently in this situation the relevant variables need to be combined across two or more abutment teeth in a judicious manner. In fact several variables were recorded for each abutment tooth, relating to the degree of preparation, the percentage of enamel covered by metal, and the presence or absence of restorations beneath the metal work. When restorations

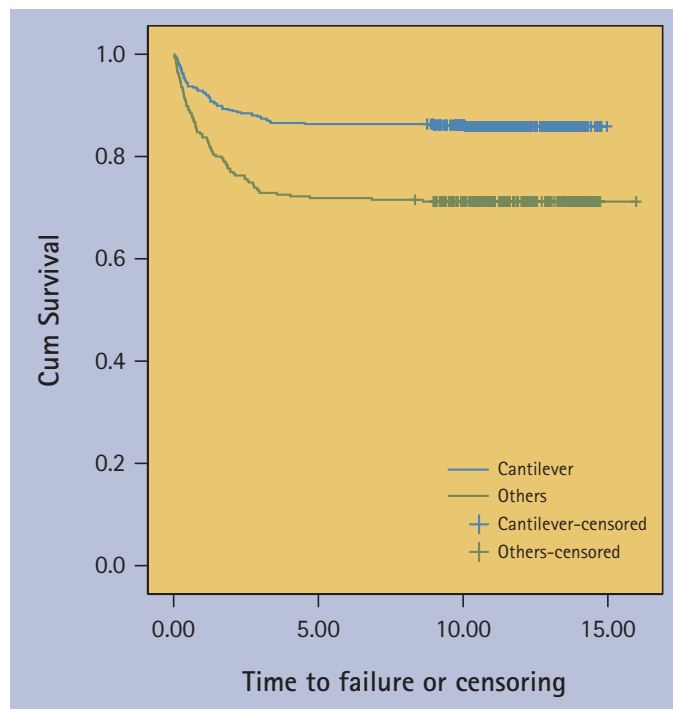


Fig. 3 Kaplan-Meier survival curves for 476 cantilever bridges and a group comprising 292 fixed-fixed and 3 hybrid bridges

were present, they were classed according to the material used, and whether the restoration was new at the time of fitting or old.

The level of preparation of each abutment tooth was recorded on a three-point ordinal scale with the following categories:

- U: minimal – none or with axial walls only
- S: intermediate – anterior: axial walls plus cingulum pit and/or fine finishing line; posterior: rest seat plus wrap around
- O: maximal – anterior: as for S above, plus approximately half enamel removed and chamfer margin; posterior: preparation of occlusal surface greater than rest seat plus wrap around.

Preliminary analyses indicated that the lowest level of preparation was associated with the best outcome. Consequently, multiple abutment bridges are classed according to the most intensive level of preparation used on any abutment tooth. The resulting failure rates were 38/357 (10.6%) for bridges with no abutment tooth recorded as beyond preparation level U, 70/224 (31.3%) for bridges with at least S level abutment preparation and 44/190 (23.2%) for those in which one or more abutment had maximal preparation. The highest failure rate was in the intermediate group S, and so the only sensible way to dichotomise this variable is to compare outcome between the 357 bridges with minimal preparation in any abutment tooth and the 414 with more than minimal preparation in an abutment tooth. This leads to a very substantial hazard ratio of 2.85 for the latter group, with $p < 0.001$.

Preliminary analyses indicated that the



Fig. 4 Double cantilever resin-retained bridge replacing teeth 12 and 22 with 11 and 12 as the abutment units

presence of restorations beneath the metal work was associated with increased risk of failure, and that this applied particularly to old restorations. Consequently the information relating to presence and age of restorations was combined across multiple abutments to produce an ordinal classification with three groups. Failure occurred in 109/652 (16.7%) of bridges with no restorations beneath the metal work, 13/54 (24.1%) of those with new restorations only, and 30/65 (46.2%) of those with one or more old restoration. Presence of new restorations only was not associated with significantly increased risk. Consequently this group was combined with the low risk group with no restorations to produce a binary

variable that identifies the 65 cases with one or more old restoration as at a threefold increased risk of failure.

Table 3 gives similar analyses for five variables that were not statistically associated with risk of failure. The Angle incisal classification system segregates the participants into four groups. A Cox regression model treating this as a categorical variable leads to a p-value of 0.09.

Considering the number of pontics replaced, there was a failure rate of 120/626 (19.2%) when just one pontic was replaced, 25/118 (21.2%) for two-pontic bridges, 4/13 (30.8%) for three-pontic bridges and 3/14 (21.4%) for four-pontic bridges. The hazard ratio for multiple pontic bridges is 1.18 ($p = 0.41$) and this is in marked contrast to the hazard ratio of 1.94 ($p < 0.001$) for multiple abutment bridges.

60% of the bridges were classed by their recipients as functionally good and 38% as satisfactory. 68% of the bridges were rated as aesthetically good and 31% as satisfactory.

DISCUSSION

The aim of this study was to monitor the performance of a large number of resin-retained bridges to determine their length of survival and the factors leading to their success or failure. Inevitably, clinical studies contain restorations of varying age and it is common to find unhelpful statistical information such as the mean age of restorations in the sample. Unless survival analysis is used, it is impossible to determine the results.^{10,11} This study followed up a large sample over a time period long enough to provide statistically significant results and the recall rate (by patient) 77% compares favourably with other studies of this type.^{3,4,6} Data were collected by a single examiner and there was no measure of examiner reliability performed and this may be a limitation of the results presented.

There was no significant difference between the survival of those restorations provided for male and female patients. The age of the patient does not appear to be a big factor in bridge survival although those bridges provided for patients below the age of 30 years performed better than for those fitted in patients over 30 years of age. The most likely explanation for this is the presence or otherwise of a restoration in the abutment tooth, thereby reducing the amount of remaining natural tooth substance.

The survival rates reported in this study compare favourably to those for conventional FDP; ten-year survival rate 89.2% (95% confidence interval 76.1–95.3%) and for dental implant supported FDP; ten-year survival rate 77.8% (95% confidence interval 66.4–85.7%).¹²

It is the opinion of the authors that the

advantages of these types of restorations are that they are minimally invasive, conservative of natural tooth structure, economic and reversible. They can be provided for the adolescent patient when, for example, a dental implant retained prosthesis is inappropriate, however they should not be regarded as transitional restorations.

Design

Our results support that more extensive bridges carry a higher risk of failure and that cantilevers had a greater survival than all other designs. The single abutment cantilevered bridges were a substantial design group (433). The predictability of this type of restoration is widely reported and is most likely due to the avoidance of differential movement of the abutment teeth when fixed/fixed designs are used.

Although the survival rates of cantilevered designs are superior to others, it is too simplistic to assume that longevity is automatically associated with bridge design. Cantilever designs have been prescribed traditionally when occlusal demands are low and the stability of abutment tooth position is predictable.

Included in this study are a number of restorations ($n = 23$) used to replace missing maxillary lateral incisor teeth following a course of orthodontic treatment to open space for subsequent tooth replacement; using both upper central incisor teeth as the abutments. This design was chosen when the upper central incisor teeth had been orthodontically approximated; it limits the potential for orthodontic relapse and avoids the necessity for adjunctive fixed orthodontic retention. It is the authors' opinion that this design of bridgework should be included in the multiple abutment cantilever category for the purposes of analyses. The failure rate of this type of restoration was 8.7% over a 15-year follow-up period – this is much more favourable than other reported survival rates for resin retained bridgework provided for post-orthodontic hypodontia patients with missing maxillary lateral incisor teeth.¹³

Fixed-fixed bridges accounted for 38% of all restorations in the present study. When a fixed-fixed design was prescribed, a cantilever alternative would have been considered and rejected for at least one clinical reason; the most likely being concerns over stability of the abutment tooth position. The risk (hazard ratio) of any fixed-fixed bridge failing was over twice that of a cantilever.

Operator

As in other studies, the experience of the operator was a significant factor associated with bridge longevity. The present study included

all grades of staff at Bristol Dental Hospital including undergraduate students; the results show that for bridges provided by staff or postgraduate students (including registrar and specialist registrar grades), the survival rate was just over double that of undergraduate students. This highlights the sensitive nature of the clinical technique required for the construction and placement of this type of restoration together with the appropriate planning.

Tooth preparation

The results from this study show that increased tooth preparation is associated with bridge failure. Any more extensive tooth preparation of the abutment teeth other than into enamel only is associated with a two-fold increase in bridge failure. The survival rates from this study show that the longevity of resin retained bridgework can be predictable without substantial preparation and that failures were largely inconsequential.

Vertical grooves or pin channels have been suggested to increase retention and resistance form and vertical grooves in the abutment teeth have been suggested as a way of reducing stresses on the cement lute. Although there is ongoing debate regarding the merits of more extensive tooth preparation, the results from the present study do not support this argument.

Restorations in abutment teeth

Where restorations in the abutment teeth were present, the longevity of bridgework was reduced, particularly where old restorations, (those not replaced at the time the bridge was provided), existed. Then the bridgework was three times more likely to fail. In cases of restored abutment teeth, we would not recommend that the metal framework is incorporated into an intra-coronal restoration (boxes, grooves or anterior rest seats) as this increases the complexity of the restoration and makes dealing with failures unnecessarily complex. Where amalgam restorations exist in the potential abutment teeth, it is recommended that these are replaced with composite resin restorations.

Cementation

In all cases, the fitting surface of the metal framework was sandblasted, the resin luting cement used in all cases was Panavia (Karrary Co. Ltd, Osaka, Japan). Those bridges cemented under rubber dam were almost twice as likely to fail compared to those that were not. However, undergraduate dental students with limited clinical experience provided the majority of bridges cemented under rubber dam and it has been suggested that inadequately placed rubber dam led to this increased failure rate.

Patient satisfaction

The majority of patients rated the function of their restorations as good. In cases where the appearance was rated satisfactory, the factors relating to this were the direct display of the metalwork or the metal 'shine through' of the abutment tooth or teeth giving the abutment a grey appearance. Most of these cases were noted with bridges provided early in the investigation period. When anterior restorations were cemented using an opaque variety of the resin luting cement these problems were not encountered.

CONCLUSIONS

- Resin-retained bridges provided by a range of operators over a follow-up period to produce significant results are a predictable, non-invasive method of replacing missing teeth.
- Bond-failure was the most common mode of failure. Those that failed in this way were, in most cases re-cemented, however failure was recorded at the date of first debond.

- The success of cantilever designs is evident and has been reported previously. The use of a double-cantilevered bridge replacing upper lateral incisor teeth using both centrals as the abutments is reported as a predictable option and may aid orthodontic retention in situations where the central incisor teeth have been moved orthodontically.
- Tooth preparation appears to be unnecessary and detrimental to the survival of resin-retained bridgework for any more extensive preparation than into enamel only.
- The overall patient satisfaction for both appearance and function in those who attended for recall was high.

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COMMENTARY

Resin-bonded bridges (RBBs) have been available to replace a missing tooth for several decades now, yet their uptake by the profession remains low – often due to concerns around their predictability and longevity. There is also debate as to whether tooth preparation should be performed as part of the technique, but this is often based more on anecdote than analysis.

This interesting paper by King *et al.* makes a very important contribution to clinical decision making. The previous benchmark paper on RBBs by Djemal *et al.*¹ reported median survival times of 7.8 years for fixed-fixed designs and 9.8 years for cantilevers. The current, prospective study followed up 621 patients, with the longest lasting bridge still in place some 16 years after placement.

The results support the observation that, if an RBB is going to fail (as approximately 20% do), then this occurs within the first four years of placement. However, the paper illustrates that after this initial period there is a very high level of success – with a five- and ten-year survival rate of about 80%. Therefore, those that survive for more than four years have an excellent long-term prognosis, with results comparable to conventional (crown retained) bridges. The major advantage of a failed RBB, however, is that far fewer adverse sequelae should be expected.

One potential shortcoming of the paper, that limits its transferability to general dental practice, provides another strength. As bridges placed at only one institution (Bristol) are considered, a greater standardisation of materials and techniques has allowed other prognostic factors to be identified more clearly.

Elements that will make a resin-bonded bridge significantly more likely to succeed, and thus should be considered during planning and execution, are:

- decreased numbers of abutments
- very minimal tooth preparation ie no more than just into enamel (previous studies have shown that even very minimal tooth preparation (<0.5 mm) can inadvertently expose large areas of cervical dentine)
- use of cantilever rather than fixed-fixed designs
- avoiding placement of the bridge under rubber dam (although this may have been confounded by being associated with cementation by relatively inexperienced undergraduate clinicians)
- presence of an intact abutment (or a newly placed composite restoration within the abutment tooth).

Importantly, this paper demonstrates that RBBs can be a highly predictable form of restoration but, as always, success

is maximised by careful case selection. In terms of RBB longevity, minimalism is definitely best – less is more.

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