

Allianoi: A Missing Link in the History of Hospitals?

Daniş Baykan, *Allianoi Tıp Alatleri, Studia ad Orientem Antiquum*, 2 (Istanbul: Institutum Turcicum Scientiae Antiquitatis, Türk Eskiçağ Bilimleri Estitüsü, 2012), no price given, paperback, ISBN: 978-605-4701-12-4.

Until a few years ago, the Roman site of Allianoi in modern western Turkey was little more than a name. It was famous for its warm springs, which attracted visitors particularly from the bigger city of Pergamum, some fifteen miles away. Galen mentions the hot spring, and his contemporary, the orator Aelius Aristeides, spent some time there on the instructions of the healing god, Asclepius. A series of excavations between 1998 and 2006 brought to light many buildings in this ancient spa town, which was lavishly rebuilt, like much of Pergamum itself, in the time of the Emperor Hadrian (reigned AD 117–38). As well as a main street to the south of the river Ilyas, a large bath complex was discovered on the other side of the river, with pools and statues. Two inscriptions reveal dedications to the healing god Asclepius, whose temple at Pergamum was one of the wonders of the ancient world.

Most surprising, and of great significance for all those interested in the history of surgery and of hospitals, was the discovery at various locations within the site of some 348 surgical instruments. This compares with the 382 pieces catalogued by Lawrence Bliquez as coming from Pompeii and Herculaneum (both much larger towns with a greater number of potentially medical sites) and with the 150 or so found in the somewhat later House of the Surgeon in Rimini. A slightly smaller number of instruments is reported to have been found in a house at Marcianopolis in modern Bulgaria. All of the instruments from Allianoi have now been published by Professor Baykan in this publication in Turkish, along with an eight-page summary in English, 160–8. Each instrument is carefully described and illustrated with a small photograph and a line drawing (essential for understanding some of the more battered pieces). A few larger photographs show some of the more interesting finds, as well as the remains of seafood found on the site.

Most of the instruments are standard; scalpels, knives, probes, needles and forceps. Others are more unusual – several drills, a *meningophylax* (an instrument used in skull surgery) and possibly the remains of an anal speculum, although what survives is far from conclusive. Several of the knives and forceps are of unusual design, and there is what appears to be an instrument for crushing a bladder stone. Such a variety is not unexpected, given subtle differences in the design of instruments in the Rimini hoard, and it testifies to the precision involved in making the slight changes that would allow the doctor to use his instruments to their best advantage. Galen, in the newly discovered treatise *Avoiding Distress*, explains how he devised his own tools for specific purposes, making wax models, which he then handed over to the instrument makers for them to cast. Similar sophistication can be seen here at Allianoi, and confirms recent theories that ancient surgeons did not always rely on just a few instruments, but were well aware of the advantage of adopting slightly different tools for individual operations. Along with new surgical texts recovered among the Greek papyri of Roman Egypt, they attest the high ability of ancient surgeons, as well as the range of operations that they were prepared to envisage.

But what makes Allianoi remarkable is the archaeological context in which the instruments were found. Most of the instruments were discovered in two buildings, one on either side of the river, the first adjacent to a bath complex, the second along the main street. It is a pity that, while the find spots of the instruments in the first building are illustrated on a plan, Plate 22, there is no similar plan for the others and, indeed, that there is no way of identifying the relevant block on the general plan of the city. Instead we are given only the numbers on the Allianoi index cards, an unfortunate oversight. The map of the site itself is very small, and requires a magnifying glass to work out the scale. The plan of the first building is far clearer, but would have been improved by a larger indication of the size of the individual rooms. Given that access to larger and up-to-date plans is far from easy, even via the Internet, it is unfortunate that this crucial information is not better presented, especially as the relationship between the two buildings is obscured by a failure to indicate the river that flows between them.

The distribution and type of the instruments found in the house on the main street suggest that minor operations were performed in one room, more complex and dangerous ones in another at the back of the building, rather as in some of the houses at Pompeii. But the finds in the second and larger building are far more unusual. The building itself, much of which has not been excavated, consists of a series of small inter-connecting rooms around a large courtyard. Most of the instruments were found in five small rooms in one corner, and others were also found in the central courtyard, perhaps washed away in a flood that damaged the building. One room contained many instruments that could be used for excising uvulas or haemorrhoids, another room had largely instruments that are usually associated with eye operations. A third room had more lithotomy instruments. Professor Baykan suggests that each room was used for one speciality, with suturing and cupping taking place in other rooms across the courtyard. This is a fascinating idea, although other explanations are possible.

There can be little doubt that both buildings were used for medicine and surgery, although it would be going too far to characterise the whole site of Allianoi as a medical complex. But the courtyard building, to judge from its size and the number of its rooms, is something very different from the shop-house familiar from Pompeii or Rimini, or, indeed, from its neighbour. Professor Baykan calls it a *valetudinarium*, a hospital, not least because he finds the closest parallel to its organisation in the hospitals in Roman forts and fortresses such as Neuss or Xanten. But, as he rightly notes, military influence is at best only indirect, since Allianoi was hundreds of miles from the military frontiers in the Balkans, eastern Turkey or Syria. But by the second or third century AD the military design for dealing with patients, not all of whom would be suffering from military injuries, could well have been adapted for civilian purposes.

Professor Baykan proposes a different solution for the identity of the complex: this was the hospital where Galen successfully treated gladiators from Pergamum for several years. True, some skeletons found in Allianoi and nearby show trauma injuries, but these need not have been inflicted in the arena. But there are serious objections to this theory. In Rome and Ephesus the gladiators' barracks are situated relatively close to the amphitheatre where they fought, not over half a day's journey away, and rooms in the basement of the amphitheatre or gladiatorial school could well have served as operating theatres. There is also nothing, as yet, here to indicate the presence of the buildings of a gladiatorial school or a small arena for practice, such as is found near some military forts. Galen mentions Allianoi only for its hot spring, and he seems to have treated other patients in Pergamum at the same time. The argument that relies on the absence of archaeological evidence for

surgery at the amphitheatre of Pergamum or at the great shrine of Asclepius is extremely weak, for the former has scarcely been properly excavated, while, as the author himself admits, surgical treatment within any healing shrine is extremely unlikely.

But if this complex is not linked with a gladiatorial school, what are we dealing with? The standard view of the development of hospitals is that until the late third or fourth century AD the only civilian hospitals were those treating slaves on great estates, and that these had largely disappeared by AD 200 and were, in any event, confined to Italy. Although some have seen ancient healing shrines as some form of hospital, and particularly shrines where pilgrims could remain overnight within the complex to receive a curative vision, they are not situated in the middle of the town. Some pagan shrines, notably Cos and Epidaurus, did have adjacent hostels where pilgrims might stay, and some patients, such as Aristides, spent years in residence at the shrine of Asclepius at Pergamum, but there is no written or archaeological evidence for any medical, let alone surgical, intervention to the extent implied at Allianoi. The later Christian hospitals certainly offered food and shelter for those in need, and at times medical assistance, but there is nothing of the architectural complexity of Allianoi outside major cities. Nor, apart from healing shrines, is there any trace among non-Christians of any large-scale medical institutions that can be characterised as charitable.

A clue to the origin of this 'hospital' may come with the thermal complex next door, although there appears to be no direct connection between the two. Indeed, the 'hospital', positioned at an angle to the baths, may have preceded the enlargement of that building. Whatever their relationship, it is no surprise to find doctors practising at a spa. The most famous set of ancient surgical instruments comes from Bingen, a spa town on the Rhine that served as a favourite place of rest and recreation for soldiers from the Roman fortress of Mainz. Some ancient doctors worked on their own, as in Rimini, but elsewhere, as at Metapontum, several joined together in the same 'medical workshop', which would have occupied a larger space than a single property. This could well be the case here, with a variety of rooms in which individual practitioners could treat the sick, some of whom would have come to the spa in search of healing. If a doctor like Galen could look after patients for a while in his own home, it is not unlikely that a workshop with many practitioners would have several rooms where patients might stay after an operation.

Whatever explanation is given for this complex, there can be little doubt that it served a medical purpose, at least in part, and that it fills in a chronological gap between the Roman military hospitals and the later Christian charitable institutions. It seems to have come to an end around AD 250 through some natural disaster, perhaps flooding, after a century or so of use. Although questions still remain, only the most scrupulous would seek to deny it the title of hospital, even if contemporary Greeks would have called it a 'medical workshop', *iatreion*. Professor Baykan has performed a great service by publishing the remarkable collection of instruments from this and other sites in the small town, and by alerting those unfamiliar with these excavations to their importance for medical historians.

However, many of the problems he raises are destined to remain for many years unanswered, for in an act of remarkable cultural vandalism the whole site, baths, housing blocks, hospital and all, was drowned under many metres of water when a dam was constructed over it in 2010. Despite international pressure and various suggestions for saving the site, all that has been done after a rescue excavation has been to cover the site in sand in the hope that a full investigation may become possible many decades into the future. What we have is tantalising, not least because so much of the ancient town now

remains beyond reach, but this book will serve to alert the wider scholarly community both to the riches that have already been found there and to the opportunity that has been lost to provide these exceptional finds with a proper context.

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Patrice Bourdelais and John Chircop (eds), *Vulnerability, Social Inequality and Health* (Lisbon: Edições Colibri, 2010), 172 pages, € 10.00, paperback, ISBN: 978-972-772-998-2.

This compact book consists of the editors' introduction and nine papers delivered at the two conferences held in Paris in 2007 and 2008 around the theme of 'Vulnerable populations and welfare reforms'. The editors describe three common issues which are supposed to intersect all papers in the volume: (1) the shifts in the definition of vulnerability over time and place; (2) the coping strategies of individuals, groups and communities in dealing with vulnerabilities; and (3) the reforms of social welfare and health care systems. But, understandably in view of the fact that they are collected from two separate conferences, not all papers address all three of the issues to the same degree, and their focuses are actually diverse. Temporally, they scatter between the sixteenth century and the present and geographically, from France, Mediterranean port districts, Portugal and Spain to Poland and Romania.

The editors note that vulnerability has been defined through the perspectives of age, gender and social class. Let us here touch upon the topics of the nine papers very briefly according to this classification, regardless of the actual order of the papers in the book. Three papers approach the issue of vulnerability from the perspective of age. Serenella Norris-Vigilante's paper, 'Hospitalised children: Their frailties and ill-treatment in nineteenth and early twentieth-century France', highlights the ways in which children were defined as vulnerable through cultural negotiations between doctors and parents. Children in the early twentieth century turned into the elderly of the final decades of the century. Claire Scodellaro's paper, 'The vulnerability of the elderly in France: The case of the generations born during World War I,' suggests, based on a cohort specific mortality analysis, that the vulnerability of the elderly in late twentieth-century France was related to their living and health conditions in their infancy (in particular, in the 'mortality crises' of the First World War and the Influenza Pandemic in the late 1910s). Andrea Fabian focuses on the vulnerability of present-day Romanian children whose parents work away from home for economic reasons, in her paper 'The effects of parent migration in Romania: Assessing the vulnerability of families and "abandoned children"'.

There are two papers in which the gender perspective is strongly present. Critically drawing analytical insights from various historical or sociological visions such as the 'female agency approach', the Bourdieuan and Foucaultian notions of the *habitus* and the body, and the neo-materialist emphasis on political economy, John Chircop examines