

### 3 **Medicine in Late Antiquity and the Early Middle Ages**

VIVIAN NUTTON

#### *Introduction*

Any analysis of the transition from Classical Antiquity to the Middle Ages depends on whether one's standpoint is Gaul, Rome, Constantinople, or the frontier lands of Mesopotamia. East of Italy, in the Byzantine Greek world down to the fall of Constantinople in 1453, continuity is more striking than change. The fearsome plague that ravaged the Mediterranean world in 541–44 was described by contemporaries as if it were the Great Plague of Athens a millennium earlier (p. 13). Medicine as taught in thirteenth-century Constantinople resembles that of second-century Alexandria. Innovations are few: some medicaments and recipes from Persia and India entered the Byzantine pharmacopoeia, and a handful of Arabic medical writings were translated into Greek by 1300. John Zacharias Actuarius, a leading teacher and doctor at Constantinople in 1320, stands recognisably in the same tradition of Aristotelian philosophy and Hippocratic medicine as Galen himself. Byzantine surgeons performed complicated operations with specialist instruments, and may even have dissected, on the Galenic model (p. 66).

There are similar continuities in the legal status of Byzantine doctors in these regions. In the small towns of sixth-century Syria doctors enjoyed the same legal rights and privileges as their Roman predecessors 500 years before (p. 45). Indeed, their social status may have increased, for as the Roman Empire dissolved into a multitude of lesser ethnic groups, their desire to understand earlier Greek medical texts and to communicate with patients enforced a multi-lingualism that enabled them to cross political and ethnic frontiers. In Constantinople by AD 960 there was a medical guild incorporating a variety of practitioners, numerous enough to be mocked by satirists or condemned by

biographers of saints. Two centuries later, laymen and doctors elegantly discussed knotty problems in Galen, and, in Constantinople at least, purchased copies of such treatises as Galen's *On the Parts of Medicine* which today no longer survive in the original Greek.

Two qualifications, however, must be made to this picture of continuity. Firstly, the economic, military, and political crisis of the seventh century profoundly altered the infrastructure that had supported the medical life of the Greek East. Cities like Ephesus or Pergamum shrank to mere villages, and the Byzantine Empire contracted over the centuries to little more than Constantinople and its hinterland. Evidence for medical life comes increasingly only from Constantinople, which was hardly typical of the rest of the Empire. Secondly, Byzantine medical institutions had shallower roots than ecclesiastical ones. Official professors of medicine, for instance, required a substantial commitment of government funds that was rarely forthcoming even at the best of times. An illusion of continuity may thus be gained from gazing across at isolated peaks, and forgetting the deep troughs that intervene.

The Greek East had from AD 330 a single capital, Constantinople. By contrast, the Latin half of the Roman Empire was fragile and fissiparous. Rome was its ecclesiastical centre, but at times Trier, Milan, and Ravenna rivalled Rome as the political headquarters of the emperor. Linguistic, cultural, military, and political circumstances combined to break the unity of the Roman Empire. From AD 364 onwards, the two halves of the Empire, ruled by separate (although initially related) emperors, gradually drew apart. By AD 600, the Latin West had fragmented under the barbarian invasions into a series of separate regions. Their economic foundations were weaker than those in the East; towns were fewer, and urban institutions more fragile. Medical practice thus developed in different ways within different societies.

Throughout the Empire, however, the city landscape changed with the advent of Christianity in AD 313 as a religion professed and supported by the Emperors. There was a 'desecularisation' of the ancient world. The claims of Christianity (and later Islam) to universality annexed areas of life formerly independent of religious cult and belief. Galen's religion had been his private affair, and the Methodists' rejection of divine healing had not brought down anathemas upon them. But in Late Antiquity and the Middle Ages religion and medicine interpenetrated in various ways. The Church's insistence on a Christian community that extended from before birth to the grave and beyond

left no aspect of life untouched. Determining when a foetus became alive, had both theological and medical implications. To hold a non-religious perspective on healing was to risk being accused of a religious offence, heresy; and a cleric's concern for the eternal salvation of the soul might collide with a healer's concern for the present salvation of the body. This new context, however, was no religious strait-jacket, or necessarily opposed to medicine. Rather, it introduced new relationships and problems, based on belief in a series of sacred texts, the Bible. Hence the need first to look back at the origins of Christianity.

### *Christianity and medicine*

Judaea in the time of Christ was home to a variety of healers. There were intellectuals, acquainted with the philosophical bases of medicine; travelling healers, scarcely distinguishable from magicians; and holy men, convinced that in obedience to the Mosaic Law lay bodily and spiritual health. Jewish healers had an ancestor in King Solomon (reigned 970–931 BC), who was credited with great magical and medical powers, and the injunction of Jesus ben Sirach (c. 180 BC) to 'honour the physician for the good ye may have of him' ostensibly gave them a worthy place in society. Indeed, by AD 400 a community without a healer was, in Jewish law, no proper community. The Jews also had a religious duty to care for their fellow Jews, which extended to the lodging, and occasionally medical treatment, of pilgrims to the Temple at Jerusalem. Temporary medical assistance had been provided in Classical Greece for visitors to the great festivals, but among the Jews this took tangible and permanent form; c. AD 60 Theodotus, son of Vettenu, erected a pilgrim hostel in Jerusalem, an example of the Jewish tradition of hospitality that later Rabbis traced back to Abraham, *Genesis* 21.33.

Some Jews, however, rejected human medical assistance in favour of the divine, aware of the fate of King Asa (c. 914–874 BC), who 'sought not to the Lord, but to his physicians' and whose foot sores grew steadily worse. Skin diseases especially were associated with God's punishment for sin, and were curable by Him alone. Conversely, in a world controlled by the one God, He could heal by a miracle where others had failed.

The Gospel accounts of Christ's healing should be set against this Jewish background. In his activities as prophet and healer, Jesus was

not unique, while his careful answers to questions whether sin was the cause of disease reflected contemporary rabbinical debates. The New Testament presentation of secular healing is neutral – or ambiguous. The expensive physicians of Mark 5.26, are balanced by Luke ‘the beloved physician’; Paul’s advice to take wine for one’s stomach by the description, in the Epistle of James, of a Christian medicine of faith, prayer, confession, and the laying-on of hands. Christ’s power of physical healing was transmitted to his disciples and those who believed in him. A touch, the hem of a garment, or even a distant command would be effective, if the sufferers, or their representatives, had sufficient faith.

As Christianity developed, the New Testament texts on healing promoted a range of often competing attitudes. Some were entirely compatible with what had gone before: the Hippocratic physician was easily turned to a model of Christian medical charity. Others were vastly different. Stoic resistance to pain was not the same as a belief in the nobility of suffering or disease as some divine trial. Non-Christians would have found ludicrous one preacher’s exhortation to welcome plague because it ended overcrowding and provided swift punishment for sinners and a speedy passage to heaven for believers. Few would have agreed with Tatian (*c.* AD 160) that human medicines were the devil’s handiwork, and recovery achieved with their aid, only a snare and a delusion. The scruples of Galen, Scribonius Largus, or the philosopher Plotinus over the use of certain magical remedies in medicine (p. 55) reflect an epistemological, philosophical, and social debate, not a mighty battle in this world between God and Satan.

The Gospel miracles also provided propaganda for the new religion. A few early Christian texts refer to physical healing leading directly to conversion, e.g. the legend, current by AD 300, of the conversion of King Abgar and his kingdom of Edessa (now southeast Turkey) by the apostle and healer Thaddaeus. Most ecclesiastics, however, preferred to interpret Christ as the physician of the soul, a very common metaphor, and rarely mentioned physical healing. Their flock may have been more literal-minded. By AD 400, accounts of healing miracles, particularly those effected with the aid of relics of the saints, become plentiful. Bishop Victricius of Rouen (*c.* AD 330 to *c.* 407), joyfully welcoming the arrival of a holy relic, recited a long list of saintly cures. St. Augustine (AD 354–430) was somewhat more reserved. He regarded miracle cures by holy oil, relics, or baptism as marks of special providence, and hence rare, a qualification lost on his congregation, who

brought children to baptism to regain physical health, applied the eucharistic host to a child’s closed eyelids, and wore the four gospels as amulets to ward off disease.

Whatever learned clerics might think, there was an element of physical healing within Christianity. Hence a distrust of converts who had been formerly pagan exorcists or diviners, and a particular animosity towards the competing cults of Asclepius, many of whose miracles paralleled those of Christian saints, and other healing gods. The Egyptian holy healers, SS. Cyrus and John, established their surgery directly opposite the pagan healing shrine of Menuthis.

Doctors too fell under suspicion, for alongside St. Julian of Emesa, ‘a skilled physician of both body and soul’, or Dionysius, ‘doctor, priest and philanthropist’, captured by the Goths in the late fifth century, there were notorious pagans, like the wonder-working doctor Asclepiodotus of Aphrodisias (*c.* AD 460) and his contemporary, the Alexandrian *iatrosophist* (medical professor) Gesius. Gesius was officially a Christian, but his true sympathies were revealed when he protected a pagan philosopher and doubted the miracles of SS. Cyrus and John. He was afflicted with a disease beyond mortal cure, and recovered only with the saints’ assistance after a full and contrite confession of his impiety. Medical chants and charms, apparently amazing cures, and the possession of mathematical, astronomical, and scientific learning in an age of increasing ignorance, may all have contributed to a certain suspicion of doctors, and occasionally even to open hostility.

This does not mean that the Church rejected secular medicine, for the Church as such never pronounced, let alone enforced, any universal opinion on the topic. There were, at best, different strands of opinion, dependent far more on individual beliefs and experiences than on any scriptural text or ecclesiastical decision. The medicine of Galen and the medicine of Christianity were largely complementary. Few sufferers resorted to a healing shrine without first trying a human healer. Human failure was no proof of incompetence, for all parties understood that some diseases were incurable by human means. Even at a healing shrine, the saint could recommend a secular healer, or carry out procedures familiar to a Galenist. According to their biographer, it was one of the strengths of SS. Cosmas and Damian, the patron saints of medicine, that they had ‘thoroughly mastered the healing of Hippocrates and Galen’.

Practice also differed from theory over the causes of disease. It was a truth, universally acknowledged, that disease and sin were closely



Fig. 12. SS. Cosmas and Damian miraculously replacing the ulcerated leg of a Christian with the undiseased leg of a Moor. The Spanish artist, Alonso de Sedano, fl. 1495, shows the medical saints in full academic dress. (The Wellcome Institute, London.)

linked; illness was a consequence of mankind's fallen nature. But writers in Late Antiquity and the Early Middle Ages almost always ascribed their own, or their friends', sufferings to physical causes; those of others, particularly their enemies, to sin.

Early Christian attitudes to the body are equally diverse. The Hippocratic ideal of balance was hard to combine with praise of asceticism and the mortification of the flesh, and with illness as a trial of

sanctity. A religious rhythm of fasting and vigil was no harmonious counterpoint to the ordered progression of the humours. The more the body appeared a mere temporary habitation of an immortal soul, the less the need to attend to it. Even if such asceticism was arguably only for the super-Christian, the tension remained, to surface periodically and among minority groups from the second century until our own. Bishop Caesarius of Arles (c. AD 470–542, p. 84), St. Bernard of Clairvaux (1090–1153), the monastic reformer, and Mary Baker Eddy (1821–1910), the founder of Christian Science, are but three who set the medicine of faith and prayer above the corrupt worldly material of the body. Some monastic rules forbade drugs and human remedies; others accepted them grudgingly; and even though most Christians agreed with St. Basil (c. AD 330–79) that God had put medicines and herbs in this world for human use, many in the fifth century still thought that the truly religious should not need them. True, life in a town or a monastery, wrote St. Diodochus of Photike (c. AD 480), might not provide the best environment for an ascetic to have the love and charity towards others essential for Christian healing, but out in a desert a hermit could surely rely on faith and prayer alone.

### *Charity and the early hospital*

The Jewish tradition of hospitality (p. 73) was extended by the Christians. Christ's order to his followers to care for the sick, the poor, the lonely, and the needy was swiftly given institutional form by the creation of 'deacons' charged with the distribution of alms. It was a commitment to all in need, Christians and non-Christians alike. By AD 250 the church in Rome had an elaborate organisation for the distribution of aid. Elsewhere wealthy Christians set aside a room in their house to provide food and shelter as part of a missionary outreach. Their rivals, the heretical Manichees, established similar hostels, and the emperor Julian in 362 unsuccessfully appealed to his fellow-pagans to imitate the Jews and Christians in their charity to outsiders.

With the legalisation of Christianity in the fourth century, charity was given architectural form, at first in the Eastern Empire. Bishop Leontius (AD 344–58) founded a number of hostels (*xenodokeia* or *xenones*) at Antioch and one at Daphne, a fashionable spa nearby. Between AD 357–77, Bishop Eustathius of Sebasteia built a 'poor-house', where those who were 'crippled with disease' could find suc-

cour. At the same time, St. Basil erected outside the walls of Caesarea 'almost a new city', where the sick, the leprous, the poor, and the stranger could receive care and medical assistance. By AD 400 similar institutions were common enough to be used for an extended metaphor in a bishop's sermon. By AD 500, Edessa, a town of 8000–10,000 souls, had three hospitals, all small, which were supplemented in emergencies of plague or famine by beds erected in public colonnades to house sufferers flocking in from the countryside. Law texts, saints' lives, and accounts of pilgrims confirm that in the Middle East hospitals, even if no more than a room off a church courtyard, were now ubiquitous.

They arrived somewhat later in the Latin West – the earliest was founded by Fabiola in Rome around AD 397 – and do not appear to have spread widely in Italy, still less beyond the Alps, a reflection of the economic and social crises of the fifth and sixth centuries. They were founded under Eastern influence: Fabiola and Pammachius, whose hospital near Rome was erected *c.* AD 400, had both visited the Holy Land. In southern France the use of the Greek word *xenodocium* implies, and a very early description of the hospital at Clermont Ferrand *c.* AD 550 expressly acknowledges, that the institution came from the East.

Eastern hospitals became ever larger and more complex. Ephesus in 420 had one with over 75 beds; Jerusalem in AD 550 had one with 200 beds; that of St. Sampson in Constantinople was even larger. There are signs of specialisation. Edessa had a women's hospital by AD 400, and some big hospitals at Antioch and Constantinople were divided by AD 600 into male and female wards. By AD 650, surgical operations were being performed at St. Sampson's, and one section of the hospital was devoted to ophthalmic patients. The charter of the Pantokrator hospital at Constantinople, an exceptionally well funded royal foundation of 1136, prescribed a complex hierarchy of physicians, and even teaching facilities. But there is no evidence that such complexity was typical or existed much before this date, and the Pantokrator's 50 or so patients, one to a bed, were only a tiny fraction of the sick of this megapolis.

Physicians were present as and when necessary. A medical family at Oxyrhyncus, Egypt, in AD 570 ran their own hospital, but usually the head was a layman, chosen for probity and efficiency. At Nisibis (now southeastern Turkey) the king of Persia built a hospital around AD 550 near the Christian theological school to prevent sick students from being 'plundered and dishonoured' as they went into town for help,

and also to shift the time-consuming burden of care from their fellow-students. Its administrator was a layman, under the director of the school. Statutes of 590 maintain this reserve towards secular medicine. Theology students might be expelled for associating with physicians, 'for the crafts of the world are unworthy to be read with the books of holiness in one light.' But it is never suggested that treatment here was inferior, and some secular institutions also lacked resident physicians: others, no less sacred, gladly employed physicians.

Charting a passage from religious care to medical cure is to adopt a false perspective, even if care and cure could be distinguished. The varied terminology – hospice, hostel, poor-house, sick-house, orphanage, home for the elderly, hospital – indicates a variety of overlapping, even competing, aims. Some institutions specialised in one type of inmate, but only the name proclaims exclusivity. When we penetrate beyond the name, we find a combination of priorities. The Pantokrator's charter established on the same site both a home for the elderly and a medical hospital, and, outside the city, a leper-house unattended by any doctor. The scattered hospitals of Italy, the ubiquitous establishments of Syria, the tiny hospital at Clermont and the giants of Jerusalem and Constantinople, all shared an overall religious framework of care, compassion, and charity.

### *From Galen to Galenism*

The century that followed the death of Galen (*c.* AD 200/216) is a blank spot in the history of medicine. The Latin medical poem of Quintus Serenus, pseudo-Galenic treatises on medical astrology and *On the Ensoulment of the Foetus*, and a few scraps of veterinary writers in Greek form a poor repast after the feast of the second century. The meagre record of inscriptions and legal texts only confirms that doctors continued to enjoy (albeit with increasing difficulty) their privileges of tax immunity. When light returns, around AD 350, it is almost on a different world. Not only has the Roman Empire gained a second capital, Constantinople, and an official religion, Christianity, but also the type of medical text to survive – summaries, handbooks, and medical encyclopaedias – is new.

Although such works are known earlier, what is found in the works of Oribasius of Pergamum (*c.* 325–400), Aëtius of Amida (*fl.* AD 530 in Constantinople) and Paul of Aegina (*fl.* in Alexandria *c.* 630) is differ-

ent from Celsus, Pliny, and Galen's *Method of Medicine*. The later authors assembled extracts from earlier writers, often verbatim, into a coherent mosaic of opinions, ideas, and remedies. Their compilations can be big or small; Oribasius produced one for his patron, the Emperor Julian, in 70 books, of which over 30 survive, another in nine books for his son Eustathius, one in four books for his friend and biographer Eunapius (AD 340 to c. 414), and a single volume (now lost), the fruit of midnight discussions with Emperor Julian while on campaign c. AD 358. These medical encyclopaedias show learning, elegant organisation, and practicality, talents not to be despised or necessarily subordinated to novelty. Through them, earlier authors such as Rufus of Ephesus, Athenaeus of Attaleia, or the surgeon Antyllus (fl. AD 110), whose advice on aneurysms looks remarkably modern, can still speak in their own words. Paul's Book VI, by far the most informative Greek surgical text, covers everything from hernias and fistulae to sprained ankles and varicose veins, and from battlefield wounds to the surgical reduction of over-large breasts 'when the lady is reproached for their unsightliness'. This text is also a tribute to an Alexandrian surgical tradition, in which complicated operations continued to be performed at least until the seventh century.

But much has been lost. Over time these encyclopaedias became more and more brusque. Alternatives became irrelevant luxuries, and the word of Galen came to dominate. His qualifications were edited out, and the practical and empirical side of his work was replaced by the dogmatic, although a logically structured systematisation of all his many hypotheses was not achieved until Avicenna (p. 114). This transition from Galen to Galenism was assisted by Galen's own rhetoric. His frequent claims to be perfecting medicine were now believed. 'Hippocrates sowed the seed, Galen reaped the harvest', said one author, with the implication that only unprofitable stubble remained. The sheer size of Galen's achievement was also daunting. Few thought that they could now master the whole of medicine as he had done, and preferred either to summarise or to concentrate on only one part of what he had considered a unity.

Galen's influence spread both swiftly and widely. By AD 210 his critical comments on Christian philosophical naïveté had led Theodotus the shoemaker and his followers into heresy, and may have influenced the Egyptian theologian Origen, writing about 230. Papyrus fragments have been recently discovered of Galenic tracts copied in Egypt about

250, just when, in North Africa, the Latin author Gargilius Martialis was quoting Galen's prescriptions extensively in his *Medicines from Fruit and Vegetables*. But the triumph of Galenism should not be exaggerated. There were still Asclepiadeans in the Greek world in the fourth century, and Methodists for some time after that. In the Latin-speaking world Galen, although known, never dominated to the same extent until the twelfth or thirteenth century.

Late Antiquity also saw a progressive split between theory and practice. Such a division of medicine, first recorded c. AD 200, became by 400 a standard feature of all medical textbooks. Likewise Galen's insistence on the need for a doctor to understand philosophy was interpreted as a demand for a preparatory training in philosophy, and for a greater theoretical content in medical education. At fifth- and sixth-century Alexandria the same individual might often be found expounding Aristotle as easily as Hippocrates. Stephanus of Athens (c. AD 550 to c. 630), for example, composed commentaries on three works by Hippocrates and Galen and four by Aristotle, and wrote on theology and astronomy.

The emphasis on theory also aided the move towards a definition of medicine in terms of specific books. Although Galen himself had commented on several Hippocratic texts and singled out the *Aphorisms* as essential, he laid down no canon of set texts. But by AD 500 in Alexandria, there was not only a syllabus of Hippocratic texts (largely those preferred by Galen), but also the appearance of a Galenic canon, the so-called 16 books (in fact 24, some being regarded as parts of larger works). These were taught with formal commentaries (some of which survive), and read in a specific order, beginning with *On Sects* and *Art of Medicine* (see Appendix 3.1, p. 87). Alexandrian scholars also summarised the 16 books for ease of memory, thus imparting a further rigidity to Galenism.

This process can be seen neatly in the career of Magnus of Nisibis, who dominated the medical life of Alexandria at the end of the fourth century. His biographer, Eunapius, the friend of Oribasius, contrasted him with his colleague Ionicus, an expert in bandaging and surgery, but no speaker. Eunapius' preference is obvious, and was shared by the many students who flocked to hear Magnus. No practical physician, he was reputed to defeat death by argument, and to convince the sick they were well purely by the force of his oratory. His book on urines may survive under the name of Magnus of Emesa (a city in the same

region). Avowedly based on scattered incidents and ideas in Galen which were selected, organised, and worked up into a guide to diagnosis through the urine, it is an elegant and didactically effective production. It marks a significant shift, for it turns uroscopy, used only occasionally by Galen, into an essential element in medical practice. Henceforth, in both East and West, the urine flask becomes the symbol of the educated physician.

The same period also saw in North Africa an upsurge in learned Latin medicine based in part on Greek sources, principally the Methodists. Whether Caelius Aurelianus (c. 420) in his large nosographical handbook *On Acute and Chronic Diseases* was simply translating an earlier Greek Methodist work by Soranus or adding substantial material of his own is disputed, but the result is Latin learned medicine befitting a region in close touch with Alexandria. It is more extensive in its coverage of diseases and more academic in its approach than similar contemporary productions from Italy and Gaul, which emphasised the need for self-help in a society from which the institutions that had sustained learned medicine were rapidly disappearing. Marcellus of Bordeaux, a high official of the emperor Theodosius in AD 394–95, added to the recipes of Scribonius Largus Gallic remedies, chants, charms, and more popular material, to produce a manual of self-help domestic medicine. The differences between this and the similar handbook of Alexander of Tralles (fl. AD 570), a cosmopolitan and much-travelled Greek doctor, or the Galenic commentaries associated around AD 600 with Ravenna, the Italian headquarters of the Byzantine Greek administration in the West, mark two very different worlds. The Ravenna commentators imitated (or translated) the lectures of Alexandrian philosopher-physicians; Alexander added his chants and charms to a Galenic synthesis that derived both stability and effectiveness from its roots in a Hippocratic past. There were constraints on what a doctor could now use in a Christian world, but Alexander was still confidently part of a traditional intellectual community within a confident Eastern Roman Empire. One of his brothers was an imperial lawyer, another the architect of the great church of Hagia Sophia at Constantinople. But for Marcellus, despite his links with the court and the leaders of Gaul and northern Spain, many of the old certainties were disappearing in a new landscape. Although he recommended summoning doctors in difficult cases, his readers were expected to rely mainly on themselves; they must, like him, be 'empirics', not as follow-

ers of the Greek Empiricist sect, but as experts in what worked. In Marcellus's book, the agricultural tradition of Cato reappears just as the civic structures of Roman Gaul splinter into great medieval estates.

### *Medicine in western Europe, 500–1000*

At first sight, the institutions and practices of medicine in the sixth-century Latin West continue as they had done for centuries. In AD 530 and 531 imperial laws fixed the maximum price of a slave doctor at 60 *solidi* (10 more than a secretary). In AD 534 the Emperor Justinian fixed the salaries of the five *archiatri* (doctors-in-chief) of the province of Africa at 99, 70 and 50 *solidi* a year, roughly equivalent to that of a local judge or a minor bishop. A few years earlier, Cassiodorus had described in flowery prose the duties of the Count of the Roman *archiatri* for his monarch, Theoderic the Ostrogoth (reigned AD 493–526). Like a similar official in Constantinople, the Count exercised an oversight over the doctors in the city, treated the Emperor, judged all medical disputes, and decided who should join the prestigious College of Physicians and gain the title of *archiater*. King Theoderic was attended on his deathbed by a priest-doctor Elpidius (fl. AD 510–30), whose varied career had taken him from Lyons and Milan to Constantinople, and given him wealth enough to restore some ruined baths at Spoleto (Italy). His contemporary, Dr. Pegasus of Laribus in Africa, could afford to ransom the governor's son for 50 *solidi*, about 10 years pay for a soldier. In AD 576, Leunast, Archdeacon of Bourges (Central France), sought help for his eye-cataracts from several physicians as well as from the nearby shrine of St. Martin at Tours. Although his pilgrimage brought some relief, he also had himself bled by a Jewish doctor in Bourges. He became totally blind, fit punishment, remarked Bishop Gregory of Tours (AD 539–94), for seeking Jewish help after receiving God's grace through the saint. At Ravenna, in AD 572, a sale document was witnessed by the son of Leontius, 'doctor, at the Greek *schola*', and medical lectures on the Alexandrian model were still being delivered well into the seventh century.

But these apparent continuities mask enormous social and intellectual changes. The legal documents may not correspond to any reality; although their context suggests a specific problem, no slave doctor is otherwise recorded for certain after AD 250, and five *archiatri* could do little in a populous province like Africa. The medical careers reflect

what is going on in a few (and, especially in Ravenna, atypical) urban centres. The truth is revealed in a sermon by St Caesarius of Arles (c. AD 520). Outside the towns, there are no doctors, only folk-medicine and superstition; inside, medicine is more sophisticated, but extremely expensive and tinged with paganism. In Caesarius' ideal Christian community, blessing and unction replace both types of healing. Scattered records of *medici* survive, however, some in unexpected places, like the Lleyn peninsula in North Wales, but the literary sources show a largely rural population left to their own devices and to the mercy of disease, famine, and war. From Ireland and Wales (where king Maelgwn died in 547 of 'the yellow plague'), through France, Germany, and Spain, to Italy and Africa, authors tell tragic tales of epidemics of fever, boils, dysentery, and the like, which nothing, save the occasional intervention of a saint, could cure. The resources for the maintenance of an active intellectual tradition of medicine were also diminishing. If in the fourth and early fifth centuries pagan and Christian learning were assimilated into a Latin-speaking world, the sixth century saw a retrenchment. Schools were closed; Latin became more and more confined to the church and the monastery. The same Cassiodorus who praised the noble art of medicine before Theoderic advised the monks of his monastery at Vivarium (southern Italy) to aid the sick with medicines and with hope in God. He recommended to the library a few essential medical texts – Gargilius Martialis, *On Gardens*; some Latin versions of Hippocrates and Galen's *Method of Healing, for Glaucon*; an anonymous compendium; an (illustrated?) Dioscorides; Caelius Aurelius, *On Medicine*; Hippocrates, *On Herbs and Cures*; and a few other books, a meagre harvest from Classical Antiquity.

His list is instructive. Firstly, the texts are largely practical; what theory they contain is presented dogmatically, with little room for discursive, Galenic argument. Secondly, the familiar names may hide a variety of unfamiliar or suppositious works. Six tracts from the Greek Hippocratic Corpus were already translated into Latin, including *Aphorisms*, *Prognostic*, and *Airs, Waters and Places*, but *On Herbs and Cures* is not among them, unless it was a compilation of extracts from *On Diet*. Early Medieval Latin manuscripts transmitted, under the heading of Galen's *Method of Healing, for Glaucon*, a partial translation of its two genuine books along with others that were certainly not his. 'Caelius Aurelius' may refer to Caelius Aurelianus or to a popular compendium on fevers ascribed to an Aurelius. The Dioscorides may not be

a Latin version of the famous herbal, but the spurious tract *On Feminine Herbs* that survives in seven manuscripts written before 900. This attribution of short practical works to famous names, or to none, is typical of Early Medieval Latin medicine. Thirdly, the combination of guides to diagnosis and therapy with a herbal is common, as in the *Lorsch Book of Medicine*, written about AD 795 in the Benedictine Abbey of Lorsch (southwest Germany), which contains brief introductory texts on anatomy, the humours, and prognostic (as well as an abbreviated Hippocratic *Oath*), and ends with a long series of recipes and practical advice and a letter on diet. Cassiodorus' choice of books may have constituted 'a literature for barbarians', but, equally, they preserved much practical therapy of Antiquity (and no small amount of its basic theory).

Such knowledge was also transmitted through encyclopaedias like the *Etymologies* of Isidore of Seville (d. AD 640). Its sections on medicine (in Book IV on diseases and cures, Book XI on anatomy) summarise learned medicine, and its influence can be traced throughout Early Medieval Europe. Its very title, though, suggests the new context in which its medicine was studied – as words, by grammarians. To understand the meaning of the terms was to penetrate to the very essence of the divinely created world. Its medicine revealed truths about man and God, and the covers of the book protected this knowledge from the unlearned and from decay.

The fact that these manuscripts of medicine were written and read in the libraries of great Benedictine abbeys, like Nonantola (northern Italy) or Reichenau (southern Germany), or, after AD 800, of the revived cathedral schools, such as Chartres (France), indicates the Christian context of early medieval medical learning, as well as the restricted milieu in which any form of book-learning flourished in the early Middle Ages. What was read, copied, and, even more important for the future, preserved must satisfy the needs and the preconceptions of Christians. This does not mean that all early medieval medicine was monastic or that secular medicine was overshadowed by miracle healing – far from it. In his account of St. John of Beverley (d. AD 721), Bede (AD 672/3–735) demonstrates that he and John were well aware of the complementary roles of both types of healing. If doctors broke their own rules for bleeding, it was not surprising that their patient developed nasty complications. The sign of the cross made a dumb man speak, but his instruction in language required only good teaching, and his skin disorder and dandruff were left by John to a doctor. Herebald,

