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A HOSPITAL WITHIN A MONASTERY: AN EXAMINATION OF MEDICAL REMAINS AT THE ALAHANA PARIVENA MONASTERY IN POLONNARUVA, SRI LANKA

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Abstract: The *Alahana Parivena* monastery gained wider public and scholarly attention through the "UNESCO- Sri Lanka Cultural Triangle Project", which was funded under the Central Cultural Fund Act of 1980, and the excavation project of the *Alahana Parivena* monastery (1981-1999) was led by Prof. Leelananda Premathilleke, a prominent scholar in the field of archaeology in Sri Lanka. Built in the 12th century A.D., the monastery was established under the royal patronage of King Parakramabahu I in a period defined by monastic expansion and reform of the *Sangha.* Excavations at the *Alahana Parivena* site revealed a sophisticated architectural layout, including a chapter house (*simagara*), numerous monk dwellings *(kuti)*, a specialised sanitary complex, and a monks' hospital, among other structures. The hospital site proved particularly rich in artefacts, containing surgical equipment and equipment used for the preparation and storage of medicine. A

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significant find among these artefacts was a medicinal trough *(beheth oruva),* further confirming the site's medical function. Building upon the primary documentation on the monks' hospital produced by surgeon Prof. Arjuna Aluwihare and Prof. L. Premathilleke, this study offers an expanded analysis of the *Alahana Parivena* hospital's surgical and medical remains. Current scholarship lacks a detailed examination of the surgical and medical toolkit found at *Alahana Parivena* monastic hospital. This study addresses the gap by delivering an elaborate physical and functional assessment of the excavated instruments. Further, it contextualises these findings in the larger tradition of monastic healthcare while exploring the medical sophistication of early Sri Lanka.

Keywords: Alahana monastic hospital, early Sri Lanka, medical history, Surgical equipment

Introduction

Archaeological, epigraphic and ancient literary sources provide evidence of a highly developed medical tradition in Sri Lanka that extends back several centuries. Structures commonly identified as "hospitals" have been revealed by excavations across the island, and they appear to have served diverse therapeutic and medical functions. Many of these sites are characterised by the presence of a medicinal trough *(beheth oruva),* grinding stones, sanitary facilities and other architectural remains indicative of an organised medical space (Mahinda, 1994, p. 20-25). At sites such as *Thūpārāmaya , Ruvanvalisāya,* and *Dīghavāpi*, medicinal troughs and associated implements have been identified (Ibid.). However, the hospital complexes at *Mihintale* in Anuradhapura, *Madirigiriya* in Polonnaruva, and *Alahana Parivena* in Polonnaruva can be conclusively identified as evidence for the presence of ancient hospitals due to the convergence of archaeological, architectural, inscriptional, and literary evidence. This study centres on the hospital site found at the *Alahana parivena*[1] monastery and its excavated surgical and other medical instruments, situating them within the broader medical and surgical practices of early Sri Lanka.

Why is Alahana Parivena and the ancient monks' hospital within it important?

Built in the 12th century A.D., the *Alahana Parivena* monastery at Polonnaruva stands out as the archaeological site that displays comprehensive evidence for the presence of an ancient hospital when compared to other hospital remains found in Sri Lanka (Premathilleke, 1981-82).

Firstly, although *Chūḷavaṃsa* [2] records a monastic educational establishment named *"Alahana Parivena"* founded by King Parakramabahu I , suggesting an institutional context capable of supporting a hospital premise:

> Further the Prince (King Parakramabahu I) had built there the **Alahana Parivena** which had all the distinguishing marks (belonging to a such a building), being not too far away, and the like, and which universally acknowledged as beautiful. There he built for the thera a splendid pasada with rooms and terraces, with a choice of various apartments, embellished by turrets, three storeys high. Further forty long pasadas and as many as privies, eight small pasadas and six gate towers, thirty-four fire houses and two larger outer walls, the Subhadda-cetiya and the Rupavati-cetiya; besides that charming image house of five storeys for which- as it was adorned with ornaments of flowers and creepers with figures of gods and Brahmas and embellished with buildigs, with turrets , grottoes, and halls (Geiger, 1930, p. 107 lines 48-54)

Further, elsewhere in the *Chūḷavaṃsa* , the author records that King Parakramabahu I himself was a "surgeon" and built a grand hall for the care of the sick in Polonnaruva and personally instructed others in the use of medical instruments:

> Here upon the ruler of the men filled with pity had another great hall built for many hundreds of sick people. And as the ruler of men was himself versed in medical lore, he the all- wise summoned the physicians,appointed them, tested in every way their healing activities, and if their medical treatment had been wrongly carried out, he met them with the correct method, pointed it on to them as the best of teachers and showed them proper use of the instruments by skillfully treating several people with his own hands (Geiger Ch:73, vv 38-48)

Secondly, the medicinal trough excavated from the *Alahana Parivena* monastery is considered as one of the best of its kind found in Sri Lanka (a detailed discussion of this follows in later sections). Excavations further reveal that nearly eighty percent of the artefacts are associated with medical use (Mahinda, 1994, p.225). Finally, among all excavated hospital sites in Sri Lanka, *Alahana Parivena* monastic hospital is the one of the few ancient hospital sites in Sri Lanka where surgical instruments closely resembling modern tools have been recovered yet (Aluwihare,2021), highlighting its exceptional status in the island's medical history.

Methodology, Materials and Textual Sources

Surgical instruments excavated from the *Alahana Parivena* hospital site are metal applicators/hookers, probes, large scissors, small scissors, a lancet, different types of forceps, and a scalpel. Complementing these are the excavated non-surgical instruments, such as an oblong grindstone, a circular grindstone, areca nut cutters,

a spoon, weighing scales and pans, weighing scales with a case, different types of containers, and a medicinal trough. Fieldwork was conducted across four separate site visits to the *Alahana Parivena* monastery complex and the Polonnaruva Archaeological Museum. These site visits allowed a primary investigation of the monastery's spatial organisation and allowed detailed documentation and functional analysis of the excavated surgical instruments. To supplement archaeological data, this study also utilises first-hand accounts from the senior lecturer D.K Jayarathne, an original member of the *Alahana Parivena* excavation team, ensuring a thorough understanding of the excavation process and excavated material. The primary source material for this study includes the *Alahana Parivena Excavation Reports* (1981 onwards) and the cilinical assessment of surgeon Prof. Arjuna Aluwihare about the surgical and non-surgical instruments in his 2021 work, "*Surgical Instruments at the Alahana Parivena Hospital in Polonnaruva*". Prof. Aluwihare's first-hand analysis of the excavated equipment confirms the presence of advanced medical practices within the monastic hospital system. The case of *Alahana Parivena* raises the pivotal question: does the *Alahana Parivena* represent the pinnacle of medical sophistication in early Sri Lanka, or are these artefacts an isolated anomaly? In order to examine this question further, this study also read ancient chronicles of *Mahāvaṃsa* and *Cūḷavaṃsa,* with the intention of tracing the development and the evidence of the nature of healthcare facilities that existed, specifically in the 12th c. CE. Ephigraphic evidence and other Pali texts are also taken into consideration in order to affirm the sustained tradition of local healthcare innovations' link to Buddhism.

A Brief Discussion of the Healthcare System of Ancient Sri Lanka and its Buddhist Influence

Mahāvaṃsa and *Cūḷavaṃsa,* along with other epigraphic evidence, describe specialised healthcare facilities within the island. Some notable references are the presence of *sotthisālā* (සොත්ථිසාලා, healing halls), *vejjasālā* (වෙජ්ජසාලා, physician halls) and *sūtikāgāra* (සූතිකාගාර, maternity/labour wards), alongside function-specific facilities like *upassaggasālā* (උපසග්ග සාලා), designated for epidemic or contagious diseases, and *bhesajjasālā* (භේසජ්ජසාලා), which were considered as "medicine homes" (Mahinda,1994, p.182). Central to this system were also *Janthagaras* (ජන්තගර), which were healthcare facilities within Buddhist monasteries (Kulatunge, 2019). According to the ancient Pali chronicle *Dipavamsa,*

Janthagaras were built in early Sri Lanka for the *bhikkus* (monks) during the reign of King Devanampiya Tissa, with their origins traced to Thero Mahinda's initiative in establishing the *Mahāvihāra*[3] in Anuradhapura (ibid). Notably all archaeologically confirmed ancient hospital sites, such as the ones at *Mihintale*, *Madirigiriya* and *Alahana Parivena*, as well as the medicinal troughs located at *Tuparamaya* , *Digavapi* and *Ruvanvalisaya,*, are in the immediate vicinity of Buddhist temples and monasteries. This spatial pattern highlights the close institutional and ideological connection between Buddhism and healthcare in ancient Sri Lanka.

In "*Some Sri Lankan Medical Manuscripts of Importance for the History of South Asian Traditional Medicine*" (2001), Jinadasa Liyanaratne discusses the historical intersections between Buddhism and the origins of Ayurveda. Drawing attention to the Sri Lankan Ayurvedic text *Vaidyalankara,* Liyanaratne notes that it explicitly links the genesis of Ayurveda to Buddhism, suggesting a doctrinal and philosophical closeness between the two traditions (p.379). Close association between Buddhism and medical practice is further reinforced by Liyanaratne's observation that nearly all medical missionaries who disseminated Indian medical science to regions suchas Tibet, Central Asia, China, and Ceylon were adherents of the Buddhist faith (p.380). Moreover, *Pāli aṭṭhakathā* texts, including the *Aṅguttara Nikāya* and the *Girimānanda Sutta*, identify forty-eight distinct illnesses and outline eight causal factors responsible for disease, reflecting a sophisticated early medical epistemology (Mahinda,1994, p.256). Medical knowledge was primarily practiced within monastic institutions, where monks acquired therapeutic expertise through scholastic training. This practice was deeply informed by the Buddhist ethical imperative of *gilānu-upaṭṭhāna* (compassionate care for the sick), which functioned as a central motivation for monks to engage in healing practices and treat fellow members of the *Sangha* (ibid., p. 136). References to physicians (*Vejja*) also appear in canonical narratives such as the *Dhammapada*, particularly in the *Cakkhupāla Vatthu* and *Maṭṭakuṇḍalī Vatthu,* both of which depict the activities of ancient doctors (ibid). According to the *Aṭṭhakathā,* medical services were rendered either in exchange for payment or through forms of physical labour, and physicians were required to dress in white, marking both professional identity and social recognition (ibid.).

The Alahana Parivena, Polonnaruva

As mentioned in the introduction, the *Cūḷavaṃsa* clearly states that the *Alahana Parivena* was founded by King Parakramabahu I. Dating back to the 12th century,

the *Alahana Parivena* is situated between *Rankoth Vehera* and the *Gal Vihara*, and the entire monastery spans over 35 hectares (Premathilleke,1982). After the consecration, King Parakramabahu I observed the division of the monastic community into different sects, which he wanted to resolve. The author of *Cūḷavaṃsa* articulates this situation as follows:

Since he perceived that few loyal bhikkus – apart from the maintenance of wives and children and so forth by the community in the villages belonging to the community, in which they saw their sole duty, beyond which there was none, – did not wish to have ceremonies in common, nor even to see one another, he desired even before the purification of the Order, for the purpose of furthering the Order of the Victor, to achieve the unity among bhikkus of the three fraternities. (*Cūḷavaṃsa,* Part II 78.6).

And as an attempt to bring the monastic community back in order, King Parakramabahu I, among many other reformations, initiated the establishment of several monasteries, such as the *Jetavana* and the *Alahana Parivena:*

Now for the bhikkus increased in this manner to many hundreds the King was desirous of building in goodly fashion large viharas, suitable for dwelling in. He therefore founded the great monastery by name Jetavana, making as it were visible to the eye the beauty of the Jetavana. [....] Further the Prince had built there Alahana-parivena (Chulavamsa Part II 78.40, 78.53).

Thus, *Alahana Parivena* emerged as a grand monastery for the *Sangha* (see Figures 1, 2, 3, 4), with the term "parivena" denoting its role as an organised educational institute for the monks.

Figure 1: The remaining structure of the Alahana Parivena
Note: Photograph taken by author 1

Figure 2:An aerial view image of the remains of the Alahana Parivena.
Note: Photograph taken by author 1

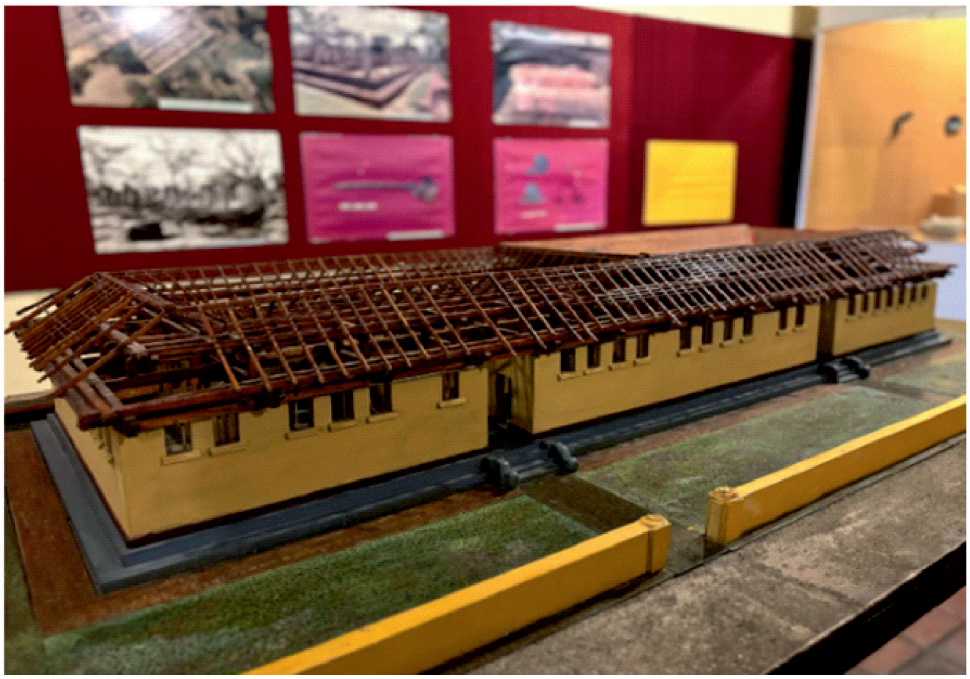

Figure 3: Polonnaruva Archaeological Museum's reconstruction of the Alahana Parivena, depicting the architectural features. Photographs taken during site visit.
Note: Photograph taken by author 1

Figure 4: Polonnaruva Archaeological Museum's reconstruction of the Alahana Parivena, depicting the architectural features. Photographs taken during site visit.
Note: L. Prematthilleke, Alahana Parivena Polonnaruva, Third Archaeological Excavation report, (April-September 1982).

The Alahana Parivena Monastic Hospital

According to the excavation reports of the site (Excavation Report-1982), prior to excavations, the area appeared as an oblong mound, with rows of pillars buried underground and no clear indication of the nature of the structure. However, following the excavation, the site was identified "as an ancient monks' hospital" (as termed by Prof. Prematthilleke), situated between *Rankot Vehera* and *Baddhasimapasada.* Further describing the architecture of the space, Prof. Prematthilleke (1982) notes that the structure of the hospital site is similar to the one found at *Medirigiriya,* though not so refined. Built of brick walls of about 100 cm thick, the hospital consists of a rectangular courtyard with cells around which is 2575 cm long and 1665 cm wide. The inner courtyard of the hospital measures 1700 cm × 700 cm. Among the remains of the hospital, many surgical instruments were excavated. These surgical instruments include metal applicators/hooks, probes, large scissors, small scissors, a lance, forceps with strong jaws, forceps with a delicate structure, spoons and a scalpel. Complementing these are the excavated non-surgical instruments such as

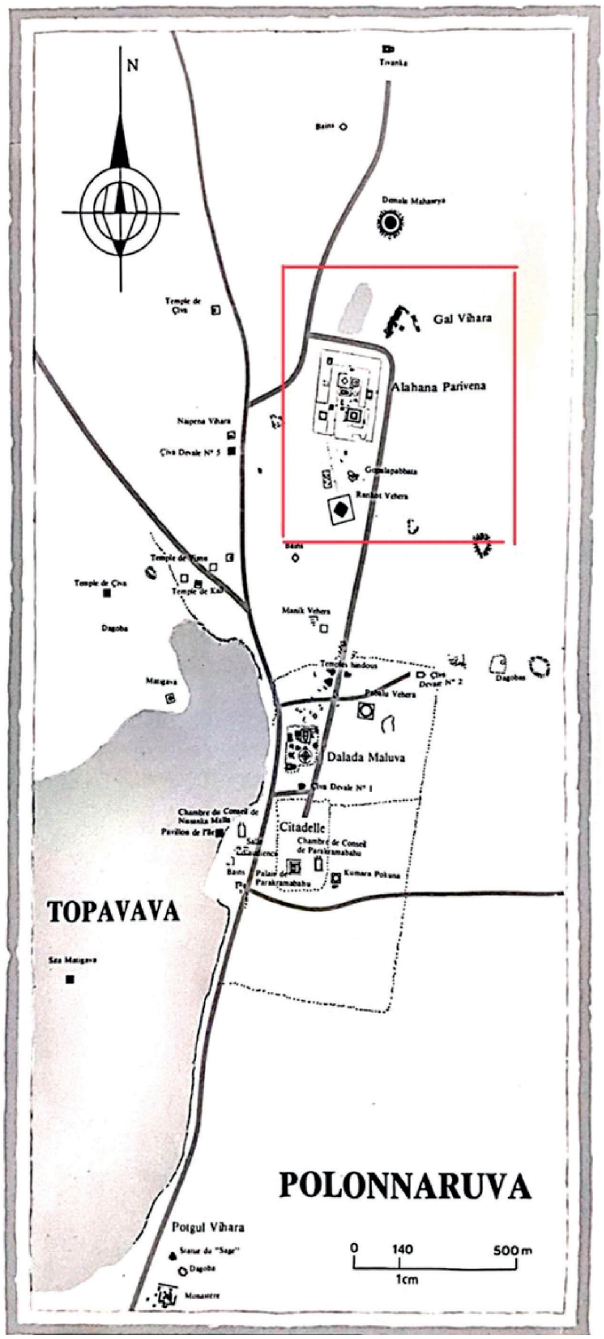

Figure 5: Map of the ancient city of Polonnaruva, illustrating the spatial positioning of the Alahana complex within the city's urban plan

Note: Photograph taken by author 1

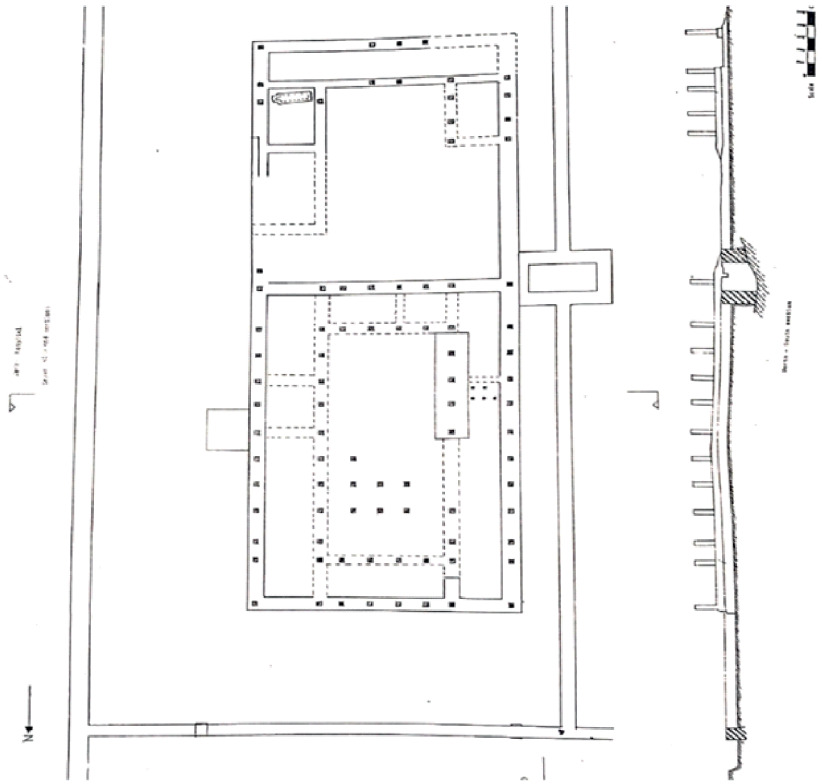

Figure 6: Drawn plan of the Alahana Hospital.

Note: L. Premathilleke, Alahana Parivena Polonnaruva, Third Archaeological Excavation report, (April-September 1982).

an oblong grindstone, a circular grindstone, nut cutters/arecanut cutters, spoon, weighing scales and pans, and weighing scales with a case, which likely facilitated the preparation and measurement of medicine. At present, these artefacts are exhibited at the Archaeological Museum in Polonnaruva.

Surgical Instruments Discovered at Alahana Parivena Hospital Site

A substantial amount of ancient literary evidence supports the prevalence of surgical practice during ancient times in the Indian subcontinent. In *Susruta Samhita,* for instance, there is a chapter-long mention of the management of obstructed labour and surgical removal of a dead foetus (Naqvi, 2003, p.89-98). However, unlike the archaeological findings of the ancient surgical practices in the Greek and Roman periods, there is a notable lack of archaeological artefacts for the surgical instruments

found from the Indian subcontinent (Ibid.). Taxila, in Pakistan, stands as one of the highlighted archaeological sites for the discovery of surgical instruments in the Indian subcontinent, and 13 medical artefacts are widely discussed (ibid.). The surgical and medical equipment found in the *Alahana Parivena* hospital, thus, becomes important as it adds to evidence of the presence of advanced surgery both in early Sri Lanka and in the Indian subcontinent.

P.V.B. Karunathilaka's study (n.d.*), "On the Practice of Surgery in Ancient and Early Medieval Sri Lanka",* traces direct evidence for the presence of surgery in early Sri Lanka through Buddhist literary and archaeological sources. The author points out an example from the *Cūḷavaṃsa* of surgery being practised in early Sri Lanka as early as the 4th century B.C. by King Buddhadasa (the author also highlights that the king had a reputation of being a master physician) on both humans and animals (ibid. p 5). Further, the Buddhist literary work *Sikhavalanda Vinisa* speaks of removal of genital organs, possibly with the use of surgery (ibid). Further, the *Karmvibhagaya,* a twelfth century literary work, states that if the foetus is in a transverse position, it would be torn into pieces with a sharp instrument *(satta).* Further, the thirteen century literary works *Yogarnavaya* and *Prayogya-Ratnavaliya* also devote two sections to discussing the surgery *(salla-vidhiya)*, where references are made to different types of surgical instruments(ibid.). *The Alahana Parivena,* built in the twelfth century, further confirms the continuity of the surgical practices in early Sri Lanka. The following section will examine the excavated surgical and other medical equipment of the *Alahana Parivena. (All photographs of this section are taken by author 1).*

Forces

Figure 7: Excavated forceps with shorter jaws

Figure 8: Excavated forceps with longer jaws

Figure 9: Excavated forceps with short arms

All three artefacts consist of paired arms forming elongated handles that extend into grasping jaws. Lengths of handles vary between individual artefacts, and all the equipment are made of either iron. This variation may indicate adaptation for different operational requirements or degrees of precision.

Figure 7 - Measures approximately 20.5 cm. The jaw of the forceps beyond the pivot is short and bifurcated, designed for high leverage. In a medical context, such robust iron instruments were typically used for bone setting, grasping large foreign bodies (like arrowheads), or dental extractions. Bone forceps and extraction forceps are used today in orthopaedic and dental surgery for similar purposes.

Figure 10: Excsvated scissor

Figure 11: Excavated blunt scissors

Figure 8 - Displays forceps with longer jaws, which suggests a more specialized or delicate function, possibly for reaching into narrower wounds or handling smaller tissues, and is approximately 10 cm long. Thumb forceps and various grasping forceps are indispensable in modern surgery for manipulating and holding delicate tissues with minimal damage.

Figure 9 - Roughly 14 cm long, with the limbs appearing more irregular and weathered. This equipment was likely to be utilised for tasks requiring a firmer and more controlled grip.

Scissors and Blunt Scissors

Figure 8 - A pair of straight scissors with two elongated blades joined at a central pivot. Absence of finger loops may reflect a utilitarian design or loss of finer structural details due to prolonged corrosion. Approximately 8 cm long , it is composed of iron. The uneven surface texture is a result of heavy corrosion. The relatively linear profile of the blades implies use in precise cutting tasks like cutting soft tissues during a surgery. At present, surgical scissors such as Metzenbaum or Mayo scissors are routinely used for cutting soft tissues.

Figure 9 - The artefact is made of two blades joined by a curved, looped spring, while the other appears to have originally formed a circular loop as well. The lack of sharp, pointed tips suggests that it may have been used for controlled cutting, likely on softer materials or for tasks that required steady, repeated pressure, like cutting bandages or dressings. Similar to the earlier artefact, these scissors are also corroded. Large, robust utility scissors or trauma shears serve the same non-tissue cutting purpose in modern clinical settings .

Scalpel

Figure 12: Excavated Scalpel

Approximately 9 cm long and made of iron. The artefact can be identified as a scalpel based on its slender form and tapering profile. Rough edges indicate surface corrosion. The scalpel used to be with a wooden handle (Aluwihare, 2021). Similar scalpels made entirely of metal exist in Taxila and Edingburgh (ibid.). Scalpels are used to make incisions in the skin and tissues. The scalpel remains the primary tool for surgical incisions. Modern versions use detachable, disposable blades with standardised metal handles, but the core function is unchanged.

Probe

Figure 13: Excavated probes

Approximately 6.5 cm to 7 cm long and composed of bronze/copper. Very similar objects were found near St. Albans (Aluvihare, 2021). A similar probe, referred to as "double simple probe" was located from Greek and Roman times where the metal is rounded of at either ends exactly like the probe found in Alahana Parivena (Milne et al. 1907) (Figure 13 (a)). In Sri Lanka, a similar copper instrument was discovered at the Pallipothana megalithic burial site in Kahatagasdigiliya. Surgical probes are still used for exploring anatomy, especially in minimally invasive procedures or for checking the patency of ducts and sinuses .

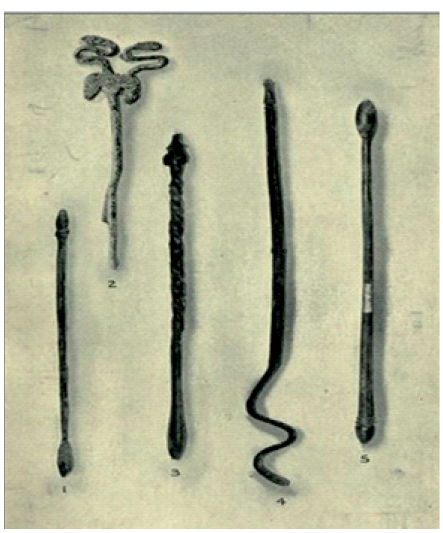

Figure 13(a) 5- Double simple probe. Surgical Instruments in Greek and Roman Times (1907)
Note: John Stewart Milne. https://www.gutenberg.org/files/40424/40424-h/40424-h.htm#Page_51

Metal Applicators / Hooks

Figure 14: Metal Applicators/Hooks

Made of copper-alloy/bronze, and the objects range from approximately 4.5cm to 6.5 cm. Artefact "A" features a flattened, spatulate and curved neck and the top appears to be truncated or broken. Artefact "B" is similar to the first but retains a more circular, disc-like terminal at the base. The longest of the three, artefact "C" features a more pronounced hook-like bend at the bottom and a narrow, potentially pierced or notched head at the top. The flattened ends suggest they may have been used for mixing or applying salves, ointments, or cosmetics. In a medical context, small hooks were utilized by physicians for retracting tissue or lifting blood vessels during surgery. The items show significant surface corrosion and mineral crusting.

Spoon

A non-specific object with potentially many uses, perhaps used for mixing and administrating medicine. Surgical spoons or curettes are used today to scoop material from cavity. Measuring spoons are standard for medicine administration. Additionally, a well-preserved spoon intended for mixing or administering medicine was discovered. It was similar to counterparts found in Rome in Italy and Taxila in modern-day Pakistan (Naqvi,2003, p. 89-98).

Figure 15: Excavated Spoon

The Medicinal Trough *(Beheth Oruva)*

The medicinal trough *(Beheth Oruva)* found at the *Alahana Parivena* resembles the trough-like containers linked to the ancient funerary and therapeutic practices embedded in Buddhist monastic life. The *Aṅguttara Nikāya* (*Mundharāja* section) records the placement of the body of a deceased royal lady in a metal trough filled with medicinal oils (Mahinda,1994, p.251). Similarly, the *Mahāvamsa* notes that the body of Mahinda Thera (who introduced Buddhism to Sri Lanka) was filled in a golden trough filled with scented oils following his death (ibid.). The first such trough in Sri Lanka was identified by H. C. Bell in 1892 at the *Thūpārāmaya* monastery in Anuradhapura. Subsequently, five additional troughs were discovered at *Ruvanvälisäya* (Anuradhapura), *Mihintale* (Anuradhapura), *Dīgavāpi, Medirigiriya* (Polonnaruva) and th*e Alahana Parivena Monastery* in Polonnaruwa (Gunawardana n.d., p.280-288). Bell initially referred to the *Thūpārāmaya*'s trough-like container as a "sarcophagus", drawing parallels with similarly shaped burial containers from ancient Egypt (ibid.). However, five years later, in 1901, he documented the discovery of another comparable structure within the *Ruvanvälisäya* monastery complex. As Bell continued his investigations across monastic sites, including *Alahana Parivena*, the trough-like installations came to be reinterpreted not as funerary containers alone, but as medicinal structures associated with monastic therapeutic practices (ibid.).

The medicinal trough found at the *Alahana Parivena* hospital was recovered in 1982 from a small chamber at the northwest end of the hospital building and it was used to immerse patients in medicinal oils (Prematilleke, 1982, p 25) (highlighted in red in *Figure 6*). It is deemed particularly noteworthy as one of the best-preserved examples of its kind in Sri Lanka to date. The design of the trough, carved in the likeness of a human figure with arms alongside it, would have helped the patient hold on firmly and remain steady while standing or reclining during treatment.

The Measurements of Medicinal Trough (Beheth Oruva)

Table 1

Total length - 197 cm	Leg length - 69 cm
Trunk length - 100 cm	Thickness of the stone - 18 cm
Trunk width - 40 cm	Height of the trough - 32 cm
Head width - 27 cm	Length of the Chamber it is located - 453 cm
Leg width - 29 cm	Width of the Chamber - 306 cm

Figure 16: The medicinal trough located at the northwest chamber of the Alahana hospital. Photograph taken during site visit .

Note: Photograph taken author 01

Figure 17: A closer look of the medicinal trough.Depicted here filled with water; originally, it would have contained medicinal oils.
Note: Photographed taken during site visit.

Excavated Weighing Scale

Furthermore, a small weighing scale was discovered north of Manik Vehera and is made of copper alloy and consists of a crossbeam, an indicator, and two pans (Jayawardana, 2010 p 59-60). The beam is 13.9 cm long, while the pans have widths of 7.4 cm and 7.5 cm and a thickness of about 2 mm. When dug, the balance was heavily corroded in an oxide layer. The pans and the crossbeam were detached, although the presence of small holes at the end of the beam and on each pan suggests they were once connected (ibid.). The craftsmanship and metallurgy prevalent by the 12th century A.D. facilitated the manufacturing of balances, having a measuring capability ranging from the weight of two madatiya seeds, i.e 0..48g, upwards(ibid.

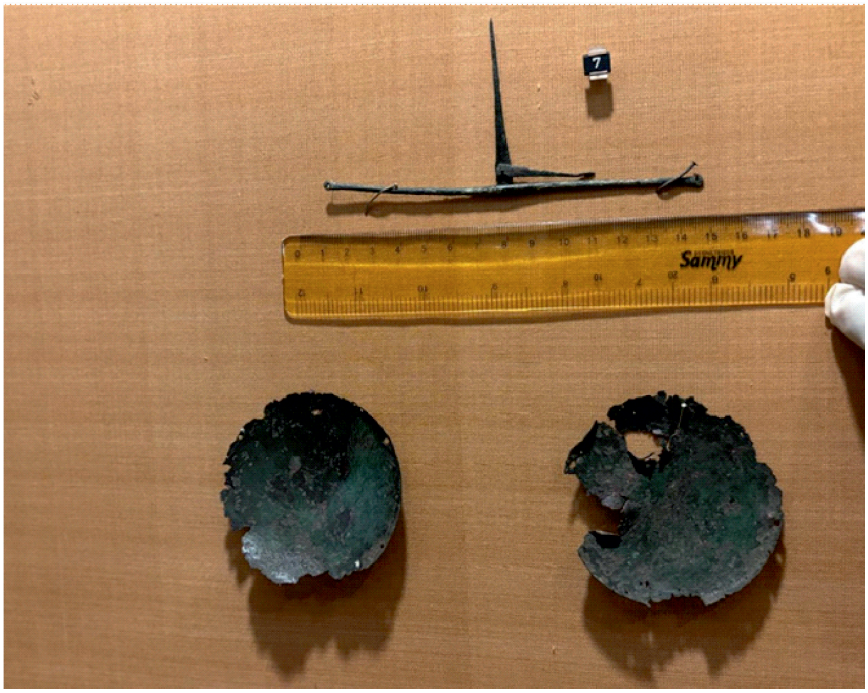

Figure 18: Weighing scale discovered in north of Manik Vehera. Photograph taken during site visit.
Note: Photographed by author 01

p 64). Prof. Premathilake states that this balance could have been used to weigh minute quantities of highly potent medicinal materials, including musk, opiates, and heavy metals such as gold and mercury.

Concluding Observations

Performing surgery with the above-mentioned instruments presupposes the ability to induce a state of anaesthesia or, at minimum, a state of deep sleep. Ancient Ayurvedic texts draw attention to such practices using the terms "*sammohini*" (සම්මෝහිනී) and "*sanjeewani*" (සන්ජීවනී), which are loosely rendered as "induced sleep" and "restoration of consciousness" (Hettiarachchi, 1999). Narcotic agents such as opium were used to induce a state of anaesthesia, while historical accounts also suggest that parts of animals were used as containers for conveying medical preparations infused with chemical substances (Ibid). This evidence suggests that alongside surgical techniques, ancient practitioners exercised an emergent form of anaesthesiology. Beyond anaesthesia, some means of managing

blood loss would have been necessary to prevent patient mortality. However, evidence for such techniques is extremely limited. Further, the grinding stones (*figure 19*) found at the premises are used to process herbs for the extraction of medicinal liquids, accompanied by two distinct pestles, engineered for horizontal and vertical grinding (Premathilleke 1982 p .) The storage vessels used for medicinal oils are of particular significance as they bear the manufacturer's stamp: the Chinese celadon from the 10th -13th century Song dynasty period. This attests to an active cross-regional trade relationship.

Figure 19: Horizontal grinding stone. Photograph taken during site visit.
Note: Photographed by author 01

Sri Lanka's pluralistic medical landscape is shaped by this continuous medical past. The surgical instruments and other medical equipment excavated from the *Alahana Parivena* Monastic Hospital site in Polonnaruva, Sri Lanka, form the core of this article, as they reveal the continuity between the tools devised in the early Sri Lanka and those used in contemporary medical practices. Such material evidence makes clear that, well before the colonial introduction of western medical practices, Sri Lanka had already developed an advanced medical tradition grounded in indigenous medical tradition. The subsequent spread of Western medicine did not result in complete displacement of these ancient sources of healing. Instead, Sri Lankans continued to move between multiple branches of healing. Such enduring

coexistence of medical traditions invites us to appreciate the continuity between the past and present of Sri Lanka's medical landscape.

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Notes

1. The term *"Alahana"* means a site of cremation, and the excavations have found crematory stupas. The term *"Parivena"* refers to an organised, institutionalised place of education for the bhikkus.
2. Chulavamsa is a Sri Lankan historical chronicle written in Pali, and it forms the continuation of the Mahāvamsa. Mahāvamsa is the "Great Chronicle", written in Pali, and narrates the history of Sri Lanka from legendary beginnings up to about the 4th century CE.
3. *Mahāvihāra* literally translates to "Great Monastery". Rather than just a building, it refers to the doctrinal center of *Theravāda* Buddhist orthodoxy. During 3rd century BCE (reign of King Devanampiya Tissa), *Mahāvihāra* became the most authoritative center of *Theravāda* Buddhism. It is often contrasted with *Abhayagiri Vihāra* which is more open to *Mahāyāna* Buddhist tradition.

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