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Studies

ARCHAEOLOGICAL MATERIAL

TRALLEIS COSMETIC AND MEDICAL INSTRUMENTS: PRELIMINARY CONSIDERATION

Abstract: In Late Antiquity, Tralleis was one of the important centres of Western Anatolia. The importance of Tralleis is supported by the richness of the finds unearthed during the excavations in the ancient city, as well as the information that has survived from the sources of the Late Antiquity to this day. Excavations in the Tralleis were carried out periodically by different teams. Gymnasium, North and West Shops located around the Gymnasium, Roman Villa Sectors, and Episcopal Church identified as the Byzantine Period church were unearthed. Excavation and restoration works were carried out in front of the Underground Tunnel System, previously referred to as the Arsenal, and inside the tunnel entrance. As a result of the excavations carried out in these areas until today, many small finds have been obtained. The small finds provide data on the daily life of the city, its trade and the transition from a polytheistic belief system to a monotheistic belief system.

During the arrangements made in the Tralleis excavation warehouse between 2020-2022, it was determined that there were many metal finds belonging to the Late Antiquity and Early Byzantine Period. Cosmetic and medical instruments stand out among the metal finds. In our study, a preliminary evaluation will be made on the cosmetic and medical instruments found as a result of the works in the warehouse of the ancient city of Tralleis and the warehouse of the Aydın Archaeology Museum. In this study, twenty-eight metal cosmetic and medical instruments found in the ancient city of Tralleis will be introduced.

Keywords: *Metal, Medical, Cosmetic, Instruments, Late Antique, Tralleis.*

TRALLEIS ANCIENT CITY AND EXCAVATIONS:

The ancient city of Tralleis is in the centre of Aydın Province. Numerous architectural remains that have survived until today show that the ancient city was located at the foot of Mesogis Mountain. Although it is known that the ancient city was founded on a very large area, the excavations were carried out in a certain area. Excavation and restoration works were carried out in front of the Underground Tunnel System, known as the Arsenal, and inside the tunnel entrance, as well as the Gymnasium and its surrounding building complexes, which are now known as Üçgözler by the public. The area to the south of the building complexes in and around the Gymnasium is a military zone. Although it is known that the city ranges over this area, no study has been carried out yet.

Excavations in the ancient city began in the 19th century. Later, as a result of the excavations carried out in different periods and by different teams, it was understood that Tralleis was one of the most important centres

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of the ancient period. In addition to architectural finds, objects related to daily life show that the existence of the city continued actively until the Early Byzantine Period. The exact information that the city was still a live centre between the 7th and 9th centuries cannot yet be supported by the finds. There is a church located to the west of the Gymnasium, close to the main entrance of the ancient city. The church was built on a structure dating to the Late Antique Period. It is thought that this cross planned church continued its function during the Middle and Late Byzantine periods. It is known that the emperor Andronicus II Palaeologos, who was in power during the Late Byzantine Period, contributed to the rebuilding of the city. In fact, the sources of the period mention the special interest shown by the emperor to the city and his contributions to the rebuilding of the city. Therefore, the ancient city was named Andronicopolis in the 13th century. Tralleis and its environs were taken by the Aydınogulları Principality and the Byzantine domination was completely ended.¹

Recent excavations in the ancient city of Tralleis continued between 2017 and 2022 by a team established under the presidency of Professor Nurettin Öztürk. The restoration of the monumental entrance gate of the Gymnasium, which is partially standing with its three magnificent arches in the ancient city of Tralleis, has been continuing since 2017. The restoration projects of the Colonnaded Street, which passes by the North Shops in the north of the Gymnasium, and the Latrina, which located in the north-east of the Gymnasium, have been completed. The excavations in the Roman Villas to the west of the Gymnasium still continue.

In addition to the excavations, the artifact storage areas in the Tralleis excavation warehouse were strengthened. Arrangements were made in the Tralleis excavation warehouse between 2017 and 2019, and the artifacts were systematically placed and made suitable for study. After the necessary arrangements were made, the artifacts in the excavation warehouse were identified and classified. As a result of the classification studies carried out in the excavation warehouse, metal, ceramic, bone, and glass artifacts were arranged according to the places they were found. Bone finds were examined in 2019-2021.² Another study started in the excavation warehouse is on metal artifacts. The aim of this study, which has been started since 2020, is to detect metal finds and classify them according to their functions.³

METAL COSMETIC AND MEDICAL INSTRUMENTS:

In addition to the warehouse of the Tralleis excavation, cosmetic and medical instruments made of bone and metal dating to the Late Antiquity were found in the inventory and study warehouses of the Aydın Archeology Museum. Studies on bone artifacts have been completed and published. Our work on metal cosmetic and medical instruments continues.

¹ TUL 2013, 72-84.

² In 2021, a book titled Tralleis I-Bone Finds was prepared about the bone finds that were examined in detail.

³ Among the metal finds of Tralleis, artifacts that provide data on daily life are being researched within the scope of the master's thesis.

The metal cosmetic and medical instruments found in the excavation of the ancient city of Tralleis will provide information about the daily life of the city. It is thought that the group of finds consisting of metal cosmetic and medical instruments will contribute to the evaluation of the development of the city in Late Antiquity and its place in the Western Anatolian Region.

During the excavation of the ancient city of Tralleis, it was determined that there were many metal cosmetics and medical instruments, both broken and in full form. Metal cosmetic and medical instruments were unearthed during the studies carried out in different parts of the excavation area. Numerous metal cosmetic and medical instruments were found in the fill area in front of and inside the Underground Tunnel System, called the Arsenal. In addition, metal cosmetic and medical instruments were unearthed during the excavations in the West Shops located in the Gymnasium and in the West Necropolis.⁴

Many ceramic, bone, and metal artifacts were found during the excavations carried out in the fill soil in front of the Underground Tunnel System and inside the tunnel entrance. When these small finds, which were made of different materials and had various functions, were examined, it was understood that they were generally dated between the 3rd and 7th centuries AD. The metal objects unearthed as a result of the studies in the West Necropolis, West Shops, and Roman Villa Sectors around the Gymnasium were examined and it was determined that they were in a chronology dating back to the 7th century AD.

Although the function of the hook presented with CAT. NO: 1 cannot be determined exactly, it is the apparatus of a medical instrument used in surgical interventions. It has a hook-end body that tapers towards the tip of the hook and a handle that makes it easy to hold. The body of the object has a pointed protrusion outward, suggesting that it was prepared to be used as an apparatus.

Among the metal finds, five spatulas with different forms (CAT. NO: 2-6) and 1 spatula handle (CAT. NO: 7) as well as 2 full-form spoon probes (CAT. NO: 8-9), and a broken spoon probe handle (Cat. No: 10) were identified. Three full-form ear probes (CAT. NO: 11-13) and two broken ear probes (CAT. NO: 14-15), which are known to be used in the field of cosmetics or medicine, are preserved in the metal artifacts warehouse of the Aydın Archeology Museum and the Tralleis excavation warehouse. Two drug spoons (CAT. NO: 16-17) with flat ends without a bowl should have been used to prepare the mixture for the therapeutic ointment or make-up material. One drug spoon (CAT. NO: 18) in different

⁴ The abbreviation ARS, which is mentioned in the catalogue as the place where the artifacts are found, refers to Arsenal. During the excavations carried out in 1999, this area was defined as the Arsenal. Today, it is understood that there is no definite data that this entrance and its connections may be connected with the Arsenal or the Sewer system. As we stated in our publication titled Tralleis I Bone Finds, a definitive identification will be made about its main function only as a result of the excavations to be carried out after the comprehensive tunnel reinforcement system in the future. In this respect, in our publication titled Tralleis I Bone Finds, we emphasized that it would be correct to define this area as the Underground Tunnel System for now (ÜNAL/TOY/ÖZCIHAN 2021, 40, footnote 4).

forms, which was found in the excavation warehouse and has not been cleaned yet, was also found.

In our work, measuring spoons in different sizes and forms are presented. The chamber shape of each measuring spoon group is in a different form, and therefore the bowl capacities are also different from each other.

The metal spoon has a deformation on the handle end (CAT. NO: 19). With its small size and circular bowl, the broken spoon is thought to be used as a measure in the field of cosmetics or medicine. Another remarkable find among the spoon finds has its other half is broken and missing (CAT. NO: 20). The body thickens between the spoon bowl and the handle, and there is an ornament in the middle. The body thickens in the other half of the spoon, which starts after the ornament motive. This means that there are two different sized spoon bowls in a single handle. This object, which is understood to have two small and large chambers placed at the two ends of the body, must be a measuring spoon. A part of the handle of one chisel among the metal finds is broken and missing (CAT. NO: 21). One probe is one of the best-preserved medical instruments among the Tralleis finds (CAT. NO: 22).

There are pins of different sizes and forms among the metal finds from the Tralleis excavation. The hole end of the small metal needle introduced in our study is especially flattened (CAT. NO: 23). It currently stands out as a single example with its different hole shape. Most likely used medicinally, the tip was rounded and flattened for easy insertion when stitching on the skin. Lastly, a tweezer and a needle prepared as a personal care tool are placed in a ring to be held together and carried easily (CAT. NO: 24).

CONCLUSION

A group of artifacts selected from among the metal cosmetic and medical instruments found in Tralleis were selected for preliminary evaluation. In our study, in addition to the finds of the ancient city of Tralleis, which were recorded in the inventory of the metal works section of the Aydın Archeology Museum, 24 objects from metal cosmetic and medical instruments in the excavation warehouse are presented. Metal objects within the scope of the study are classified according to their functions and presented in a catalogue.

The finding places of 24 metal cosmetic and medical instruments presented in our study are in front of Underground Tunnel System called Gymnasium and Arsenal, and fill area inside it. In addition to the West Shops of the Gymnasium, some of the metal cosmetic and medical instruments found in Kline 4 in the West Necropolis are included in our study. Many terracotta, bone, metal and glass find related to the daily life of Tralleis were found during the excavations carried out in the front of the Underground Tunnel System, defined as the Arsenal, and in the fill area inside the entrance. Most of the metal medical and cosmetic instruments found in Tralleis come from this area. Many terracotta, bone, metal and glass artifacts were found during the excavations carried out in the West and North Shops located around the Gymnasium. Of the 24 metal objects

examined in our study, 16 were unearthed in the fill area of the Underground Tunnel System, four in the Gymnasium West Shops and three in the West Necropolis/Kline No: 4. In the Tralleis Excavation Warehouse regulations, one spoon probe without an information slip was also detected.

The processes of identifying and recording the metal cosmetic and medical instruments found in the ancient city of Tralleis still continue. During the excavation seasons of 2021-2022, many full or broken metal cosmetic and medical instruments were found. With the final studies to be carried out in the Tralleis Excavation Warehouse in 2023, definitive numerical data will be obtained. A book titled Tralleis I - Metal Cosmetics and Medical Instruments will be prepared with the latest information obtained.

CATALOGUE

Cat. No. 1

Hook-Retractor/Speculum (?)



Inventory Number and Find Site: TRL.01-ARS/KT2 - Underground Tunnel System fill area.

Description: It has a slight bend in its body. The metal apparatus, whose lower end ends with a hook, is thought to be part of a medical instrument. The hook, on the other hand, does not provide clear data about the function of the metal medicine instrument it belongs to. Length 168 mm and width 36 mm.

Ref: UZEL 2000, 231, Levha LXXIV.42.

(3rd-6th centuries AD)

Cat. No. 2

Spatula



Inventory Number and Find Site: TRL.00-ARS - Underground Tunnel System fill area.

Description: The oval shaped spatula has a small crack and is missing. Despite being a corroded find, it has preserved its form. The handle of the spatula also ends in an oval form. Length 145 mm and width 15 mm.

Ref: BAYKAN 2012, 127, kat. no. 225; PERK 2012, 92, Photo: 8.5.3.7; ÇELİK 2015, 303, Kat. 66; EVRAN 2005, 40, no. 31; UZEL 2000, 289, Levha CXXXVII.5; RIHA 1986, 76, Tafel 51.573.

(3rd-6th centuries AD)

Cat. No. 3

Spatula



Inventory Number and Find Site: TRL.01/2.204.KT3-ARS - Underground Tunnel System fill area.

Description: The handle of the oval-shaped spatula is broken and missing. Length 145 mm and width 15 mm.

Ref: BAYKAN 2012, 127, kat. no. 225; PERK 2012, 92, Photo: 8.5.3.7; ÇELİK 2015, 303, Kat. 66; KAMBANIS 2002, 66, no.2; UZEL 2000, 289, Levha CXXXVII.5.

(3rd-6th centuries AD)

Cat. No. 4

Spatula



Inventory Number and Find Site: TRL01/1715 (Br38)-ARS - In front of the Underground Tunnel System -fill area; Museum Inventory Number: 5955.

Description: There are two thin rows of thick ring decorations at the junction with the handle of the rectangular spatula. The handle of the spatula ends in an oval form.

Length 15.5 mm

Ref: BAYKAN 2012, 44-45, 126, kat. no. 222; PERK 2012, 99, Photo: 8.5.5.20; KOZBE-GUNGOR-CANER 2019, 208-209, No.6; UZEL 2000, 204, Levha XXXIX.3.

(3rd-6th centuries AD)

Cat. No. 5

Spatula



Inventory Number and Find Site: TRL07 – Western Necropolis/Kline No: 4.

Description: The handle of the full-form spatula ends in an oval form. There is a double row of ring decoration at the junction of the spatula and the handle.

Length 19 mm

Ref: BAYKAN 2012, 44-45, 126, kat. No. 222; PERK 2012, 99, Photo: 8.5.5.18; ÇELIK 2015, 307, Kat. 70; EVRAN 2005, 40-41, no. 23 and 29; KAMBANIS 2002, 66-67, no. 3; GOLDMAN 1950, 390, 264.24; UZEL 2000, 204, Levha XXXIX.2.

(3rd-6th centuries AD)

Cat. No. 6

Spatula



Inventory Number and Find Site: TRL.01/1668(Br31)-ARS/AT3 - Underground Tunnel System fill area; Museum Inventory Number: 5899.

Description: The handle of the full-form spatula ends with an oval-shaped decoration.

Length 145 mm

Ref: PERK 2012, 90, Photo: 8.5.2.1; GALILI-ROSEN-SHARVIT 2010, 103-104, Fig. 54.5; GOSTENČNIK 2004, 439, Tafel 22, no.1; UZEL 2000, 200, Levha XXXIV.31 and 266, Levha CXIV.1; RIHA 1986, 74, Tafel 50.554.

(3rd-6th centuries AD)

Cat. No. 7

Spatula



Inventory Number and Find Site: TRL.07 - Western Necropolis/Kline No: 4.

Description: The part where the handle, which ends in an oval form, joins with the spatula is decorated with rings and circles. Spatula part is broken and missing.

Length 117 mm

Ref: PERK 2012, 99, Photo: 8.5.5.16-22.

(3rd-6th centuries AD)

Cat. No. 8

Spoon Probe



Inventory Number and Find Site: TRL.01/621 (Br29)-ARS/KT2 - Underground Tunnel System fill area; Museum Inventory Number: 5895.

Description: The handle end of the full-form spoon probe ends with an oval-shaped decoration. The handle has a grooved decoration.

Length 149 mm.

Ref: ÇELİK 2015, 302, Kat. 65; RIHA 1986, 84, Tafel 57.632.

(3rd-6th centuries AD)

Cat. No. 9

Spoon Probe/Ligula



Inventory Number and Find Site: It was found in the excavation warehouse without information. It was unearthed by the excavation studies before 2017. There is any information record or label about the object, so it is unknown when and where it was found.

Museum Inventory Number: 2021-59.

Description: Spoon probe has a very small crack at the tip of the spoon bowl. The handle ends with a knob. There are two rows of ring decoration on the body part where the spoon bowl meets the handle.

Length 12 mm.

Ref: BAYKAN 2012, 88-92, Kat. Nu. 72-84; PERK 2012, 84, Photo: 8.4.1.4; KOZBE-GUNGÖR-CANER 2019, 208-209, No. 4; AYBEK-ARSLAN-GULBAY 2021, 38, 60, Plate 7, Cat. 41; ÇELİKBAŞ 2018, 206-207, 215, Fig.7. cat. no: 55; TAL-TAXEL 2014, 163, 168, Taf.21:7 and Taf.24:10; GILL 1986, 256, pl. 366, 449; WALDBAUM 1983, 107, pl. 41, 640.

(3rd-6th centuries AD)

Cat. No. 10

Spoon Probe



Inventory Number and Find Site: TRL00/61/ARS/KT2 - Underground Tunnel System fill area.

Description: The spoon bowl of the ear probe is broken and missing. There are three rows of ring and two rows of circle decoration on the body part where the spoon bowl meets the handle. Length 92 mm

Ref: PERK 2012, 87, Photo: 8.4.2.14; BAYKAN 2012, 92, Kat. Nu. 85.

(3rd-6th centuries AD)

Cat. No. 11

Ear Probe



Inventory Number and Find Site: TRL01/1554 (Br16)-GYM/Western Shops/Number IV/2 numbered wall's front; Museum Inventory Number: 5858.

Description: Bronze unguent spoon. The full-form ear probe has a spoon bowl. There are circle and ring decorations consisting of four rows on the body part where the spoon bowl meets the handle.

Length 12 mm

Ref: BAYKAN 2012, 73, Kat. Nu. 12; PERK 2012, 82, Photo: 8.3.3.16; KAMBANIS-SKARMOUTSOU 2002, 90, no. 50; KAMBANIS 2002, 68, no. 6; DAVIDSON 1952, 184, Plate 82, 1324; GILL 1986, 256, pl. 365, 445; WALDBAUM 1983, 106, pl. 41, 629-630.

(3rd-6th centuries AD)

Cat. No. 12

Ear Probe



Inventory Number and Find Site: TRL01/1616 (Br 25)-ARS KT2 - Underground Tunnel System fill area

Museum Inventory Number: 5904.

Description: The full-form drug probe has a spoon bowl.

Length 116 mm.

Ref: BAYKAN 2012, 81, kat. no. 42-44; PERK 2012, 80, Photo: 8.3.3.4; ÇELİK 2015, 305, Kat. 68; KASAPÖĞLU 2016, 262, Res. 220, M125; EVRAN 2005, 40, no. 10-11; RUIZ-CARRETERO 2013, 18, fig. 15; ŞİMŞEK-OKUNAK-BILGIN 2011, 509, Kat. No: 368; WALDBAUM 1983, 105-106, pl. 41, 619-621.

(3rd-6th centuries AD)

Cat. No. 13

Ear Probe



Inventory Number and Find Site: TRL01/1562 (Br20)- GYM/Western Shops/Number IV.

Museum Inventory Number: 5857.

Description: The full-form drug probe has a spoon bowl.

Length 126 mm.

Ref: BAYKAN 2012, 81, kat. no. 42-44; PERK 2012, 80, Photo: 8.3.3.4; ÇELİK 2015, 305, Kat. 68; KASAPÖĞLU 2016, 262, Res. 220, M125; EVRAN 2005, 40, no. 10-11; WALDBAUM 1983, 105-106, pl. 41, 619-621.

(3rd-6th centuries AD)

Cat. No. 14

Ear Probe



Inventory Number and Find Site: TRL.02(Br21)-ARS/AT4 - Underground Tunnel System fill area.

Description: The handle part of the drug spoon is broken and missing. Half of the spoon bowl is broken and missing.

Length 149 mm.

Ref: PERK 2012, 82, Photo: 8.3.3.17.

(3rd-6th centuries AD)

Cat. No. 15

Ear Probe



Inventory Number and Find Site: TRL.02/4.349-ARS/AT11- Underground Tunnel System fill area.

Description: Part of the handle of the drug spoon is broken and missing. There is also a small crack on the spoon bowl.

Length 64 mm.

Ref: BAYKAN 2012, 77, Kat. Nu. 25; PERK 2012, 80, Photo: 8.3.3.4.; DUMAN-KOÇYIĞIT 2019, 90, Fig.126, 134, No:13, 179, Levha XXIV, M13; DAVIDSON 1952, 184, Plate 82, 1319.

(3rd-6th centuries AD)

Cat. No. 16

Flat Ended Ear Probe



Inventory Number and Find Site: TRL01/1649 (Br33)-ARS/KT2 - Underground Tunnel System fill area; Museum Inventory Number: 5903.

Description: The tip of the drug spoon ends in a flat circular form, there is no spoon bowl. The tip of the handle is oval shaped.

Length 162 mm.

Ref: BAYKAN 2012, 88, Kat. Nu. 69; PERK 2012, 78, Photo: 8.3.1.2-3; GILL 1986, 256, pl. 364, 444; UZEL 2000, 248, Levha XCIII.57.

(3rd-6th centuries AD)

Cat. No. 17

Flat Ended Ear Probe



Inventory Number and Find Site: TRL01/1633 (Br31)-ARS AT3 - Underground Tunnel System fill area.

Museum Inventory Number: 5898.

Description: The tip of the drug spoon ends in a flat and oval form, there is no spoon bowl.

Length 140 mm.

Ref: BAYKAN 2012, 88, Kat. Nu. 69; PERK 2012, 78, Photo: 8.3.1.2-3.

(3rd-6th centuries AD)

Cat. No. 18

Probe



Inventory Number and Find Site: TRL.07/Western Necropolis/Kline No: 4.

Description: The full-form probe is highly corroded.

Length 112 mm.

Ref: BAYKAN 2012, 97, Kat. Nu. 100.

(3rd-6th centuries AD)

Cat. No. 19

Drug Spoon



Inventory Number and Find Site: TRL.00/58.A2-ARS - in front of the Underground Tunnel System fill area.

Description: Half of the bowl part of the spoon is broken and missing. The handle section ends with a pointed tip.

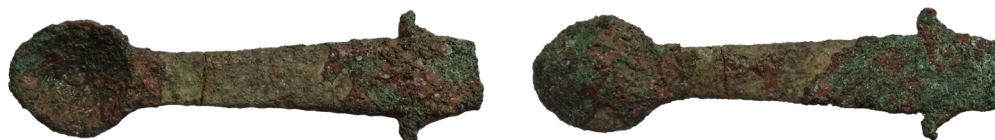
Length 80 mm and width 22 mm.

Ref: PERK 2012, 120, Photo: 11.2.8; KASAPÖĞLU 2016, 262, Res. 220, M108; EVRAN 2005, 43, no. 49; НОВИЧЕНКОВА 2016, 219-220, Рис. 5.3; KAMBANIS 2002, 84-85, no.37; RUIZ-CARRETERO 2013, 19, figs. 22-23.

(5th-7th centuries AD)

Cat. No. 20

Drug Spoon with Filtration Apparatus



Inventory Number and Find Site: TRL.00/4.316.AT-ARS - Underground Tunnel System fill area.

Description: There is an ornament on the middle of the spoon, which has a small chamber. The drug spoon's filtration apparatus (?) is broken and missing from the decoration part.

Length 63 mm and width 15 mm.

Ref: PERK 2012, 124, Photo: 11.2.2.2.

(5th-7th centuries AD)

Cat. No. 21

Chisel/Stylus (?)



Inventory Number and Find Site: TRL.99/39.K.340-350-D.200-210-ARS - in front of the Underground Tunnel System fill area.

Description: The handle of the chisel is broken and missing.

Length 30 mm

Ref: BAYKAN 2012, 122, Kat. Nu. 204; PERK 2012, 44, Photo: 2.1.1.7; UZEL 2000, 221, Levha LXI.11.

(5th-7th centuries AD)

Cat. No. 22

Probe



Inventory Number and Find Site: TRL.01/1391 (Br9)-ARS - in front of the Underground Tunnel System-fill area; Museum Inventory Number: 5780.

Description: The thick probe gets thinner towards end of its body. It has a piercing tip.

Length - 67 mm

Ref: BAYKAN 2012, 139, Kat. Nu. 273; PERK 2012, 72, Photo: 8.1.2.3.

(3rd-6th centuries AD)

Cat. No. 23

Needle



Inventory Number and Find Site: TRL.07-GYM/Western Shops/Number III (4).249.

Description: A flat form has been given to the pierced head of the needle in the form of a circle for threading.

Length 64 mm.

Ref: BAYKAN 2012, 131, Kat. Nu. 240; DAVIDSON 1952, 176, Plate 78, 1240.

(3rd-6th centuries AD)

Cat. No. 24

Toilette Cleaning Set



Inventory Number and Find Site: TRL.07.GYM/Western Shops/Number II.67.

Description: It consists of a tweezers and a needle. It is attached to a double row of loops for carrying or hanging.

Length 132 mm; tweezers length 66 mm; needle length 61 mm; ring diameter 18 mm.

Ref: PERK 2012, 106, Photo: 9.3.2.3.3; 125, MEGOW 2004, Tafel 21.767; GILL 1986, 257, pl. 373, 459; PÜLZ 2020, 132, Taf. 63, G 10; UZEL 2000, 229, Levha LXXII.30.

(5th-7th centuries AD)

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Fig. 1. Aerial view – Gymnasium Complex, Roman Villas and Church in Tralleis



Fig. 2. Aerial view – Gymnasium, Latrina and Northern Shops on the Main Street.



Fig. 3. Aerial view – Western Shops of Gymnasium



Fig. 4. Aerial view – Northern Shops of Gymnasium



Fig. 5. Aerial view of Inner Tunnel System (Arsenal)