

STUDY OF AVEDHYA SIRAS WITH SPECIAL REFERENCE TO KATIKTARUN

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Abstract: Sushrutacharya demonstrated new ground of Rachana Sharir (Anatomy) and Shalya Tantra (Surgery). He has explained different perceptions in Rachana Sharir in the Sushrut Sharirsthan. In seventh adhyaya of the Sharirsthan, he has given the detailed information on the subject matter of the Siras of the human body. In the same adhyaya the Acharya has named some Avedhya Siras which should not be punctured during the treatment stage. The Katiktaran sira is one of them. So, it is very important to know the particulars of this katiktaran sira which is present in shronipradesha (gluteal region). So, for this purpose, this study is to simplify the insight of Katiktarunsira with the help of existing anatomy. Katiktaran is also a marma which is elementary spot in the human body. So, katiktaran sira can be called as marmashrit sira.

Keywords: Avedhya Sira, Katiktarunsira, Marmashrit sira.

Introduction

In Ayurved, Sushrutaacharya has mentioned the consideration of Avedhyasiras in the seventh aadhyaya i.e. Siravarnavibhaktishariropakrama. Also in eighth adhyaya of the Sharirsthan i.e. Siravyadhavidhishariropakrama aadhyaya, explained Siravyadha means puncturing the siras for treatment purpose. Explaining this point, Sushrutaacharya told to avoid some siras from puncturing. In that, the Acharya has mentioned katiktaran sira in shronipradesha. So, it is essential to be proverbial with the concept of this sira because it should not be punctured during the treatment according to Sushrutacharya. So, it is necessary to know the structures which can be correlated with this katiktaran sira according to contemporary anatomy.¹

CONCEPT OF KATIKTARUN MARMA –

Marmas are the fundamental spots in human body, any injury to them can cause the array of symptoms like pain, blood loss, deformity etc. They are 107 in quantity and classified according to their structure (Rachana), region (Shadang), measurement (Pariman) and injury effect (Parinam).

Name of Marma	Sankhya	A/c to Shadanga	A/c to Rachana	A/c to Parinam	A/c to Pariman
Katiktaran	2	Prishtha-Shronipradesha	Asthi	Kalantarpranahara	1/2 angula

^{2&3}Katiktaran marma is present at back, on either side of vertebral column in the gluteal region. Its injury mainly produces haemorrhage, paleness of the body and finally if not treated properly may lead to death.

CONCEPT OF VIDHUR SIRA –

Saranaat sira means running and moving means movement. Any part or structure in human body which does the sravan karya is nothing but sira. The siras which should not be punctured are called as Avedhya siras. Sushrutacharya mentioned 98 avedhya siras in Sushruta sharirstha seventh adhyay. The katiktaran sira is one of them. Distribution of avedhya siras is as follows^{1&4}

Location of Sira	Number
Shakha	16
Koshta	32
Jatruurdhwa	50

According to Sushrut Sharirsthan 7th Adhyay Shlok no.27,

In the sootra, Sushrutacharya have mentioned 4 katiktaran siras and which are at back, on either side of vertebral column in the gluteal region. Taking into consideration the katiktaran sira, the structures, can be correlated with superior and inferior gluteal vessels.

SUPERIOR GLUTEAL ARTERY

The largest branch of the internal iliac and the continuation of its posterior trunk, it runs back between the lumbosacral spinal trunk and the first sacral ramus or between the first and second rami, leaving the pelvis by the greater sciatic foramen above the piriformis

and dividing into superficial and deep branches. In the pelvis it supplies the piriformis, obturator internus and an innominate nutrient artery. The superficial branch enters the deep surface of the gluteus maximus; its numerous branches supply the muscle and anastomosis with the inferior gluteal, others perforating its tendinous medial attachment to supply the skin over the sacrum, anastomosing with the posterior branches of the lateral sacral arteries. The deep branch is between the gluteus medius and the bone, soon dividing into superior and inferior branches. The superior skirts the superior border of the gluteus minimus to the anterior superior iliac spine, anastomosing with the deep circumflex iliac artery and the ascending branch of the lateral circumflex femoral. The inferior branch traverses the gluteus minimus obliquely and supplies it and also the gluteus medius, anastomosing with the lateral circumflex femoral; a branch enters the trochanteric fossa to join the inferior gluteal and ascending branch of the medial circumflex femoral; other branches pierce the gluteus minimus to supply the hip joint. The superior gluteal artery may arise from the internal iliac with the inferior gluteal and sometimes the internal pudendal.

INFERIOR GLUTEAL ARTERY

The larger terminal branch of the anterior internal iliac trunk, it chiefly supplies the buttock and thigh. It descends anterior to the sacral plexus and piriformis, posterior to the internal pudendal artery. Passing between the first and second or second and third sacral anterior spinal nerve rami, then between the piriformis and coccygeus, it traverses the lower part of the greater sciatic foramen to reach the gluteal region. Descending between the greater trochanter and ischial tuberosity with the sciatic and posterior femoral cutaneous nerves, deep to the gluteus maximus, it continues down the thigh, supplying the skin and anastomosing with branches of the perforating arteries. The inferior gluteal and internal pudendal arteries are often a common stem from the internal iliac, sometimes including the superior gluteal artery.

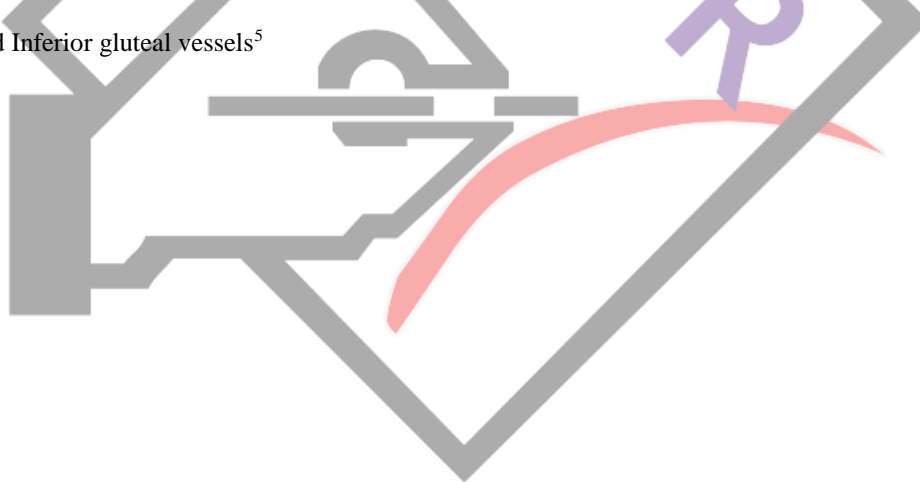
INFERIOR GLUTEAL VEINS

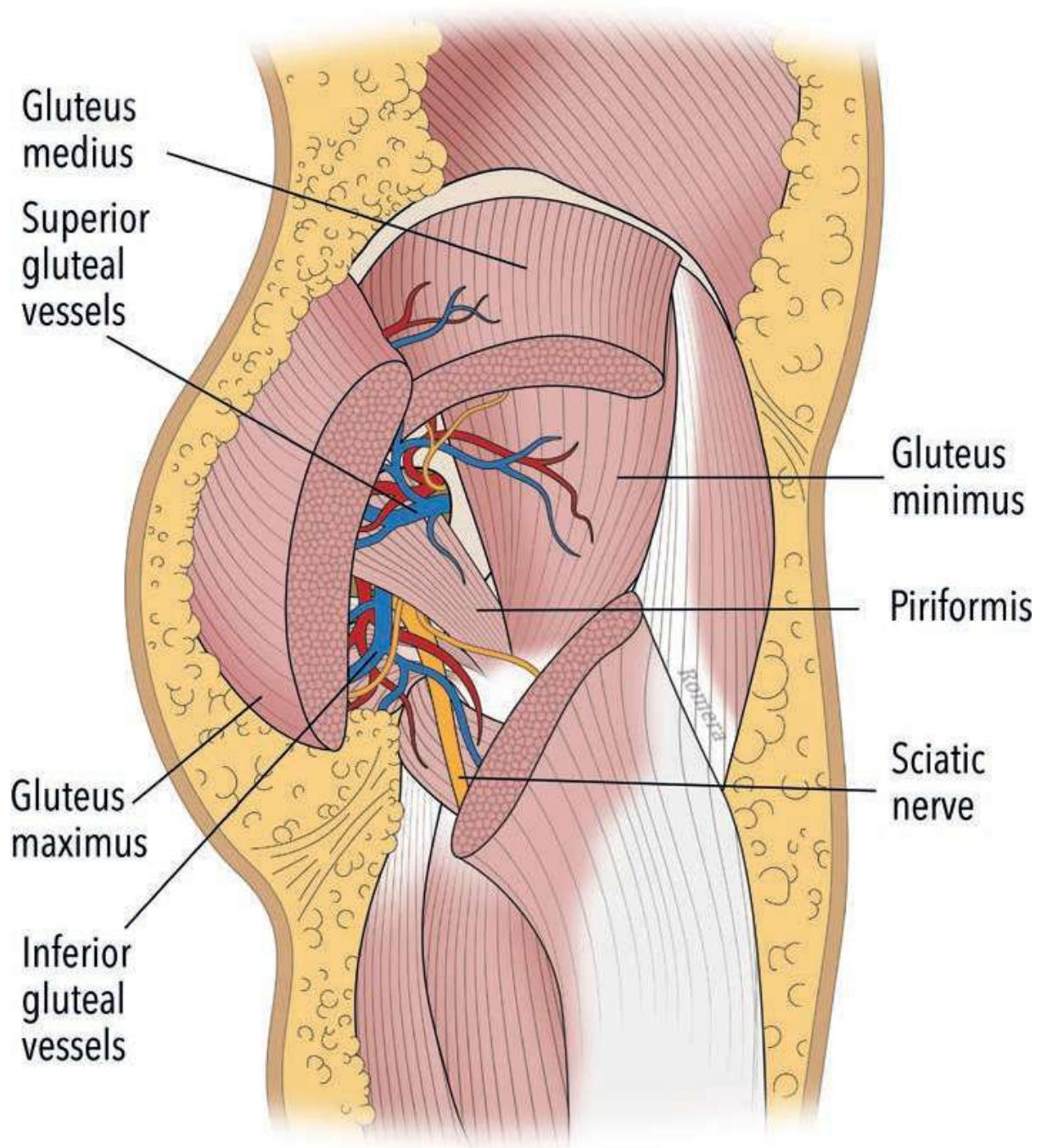
These venae comitantes of the inferior gluteal artery begin proximally and posterior in the thigh, where they anastomosis with the medial circumflex femoral and first perforating veins; they enter the pelvis low in the greater sciatic foramen, joining to form a vessel opening into the distal (lower) part of the internal iliac vein. They connect with the superficial gluteal veins by perforating veins similar to those in the calf. These gluteal perforating veins are, indeed, even more numerous than the sural ones. In addition to a probable venous 'pumping' role, they provide collaterals between the femoral and internal iliac veins.

SUPERIOR GLUTEAL VEINS

The superior gluteal veins are venae comitantes of the superior gluteal artery, they receive tributaries from the buttock corresponding with the branches of the artery and enter the pelvis through the greater sciatic foramen, above the piriformis muscle and frequently unite before ending in the hypogastric vein (internal iliac vein) ⁴.

Photo 1- Superior and Inferior gluteal vessels⁵





DISCUSSION –

Katiktaran is described by Sushrutacharya in Siravarnavibhaktishariropakrama aadhyaya of Sushrutasharirsthan . Katiktaran is the sira and it is avedhya sira.

According to Ayurved, Saranaat sira and Dhmaanaat dhamanyaha, i.e.

Going and running, these words are associated with sira as Saranaat sira. Also, puffing or gasping and blowing words are related with dhamani as Dhmaanaat Dhamanya.

Also, veins do not comprise pulse and arteries are having pulse. So, sira means the vein and Siravyadha means puncturing the siras i.e. venesection. Blood vessels comprises artery and vein are the significant aspects of circulatory system which convey the blood in the body. These are most important in every remedial crisis i.e. in any disease or in its treatment aspect. The traumatic, haemorrhagic, road traffic accident etc deaths are common. The majority of the medical crisis begins with rigorous blood loss.

So, here katiktaran sira can be taken as both superior and inferior gluteal vessels as these two vessels are closely associated so both can be taken as katiktaran avedhya siras. Also, Sushrutacharya told number of Katiktaran avedhya siras are as 04. These vessels should not be punctured because of its structural and functional importance.

CONCLUSION –

By considering the above assumed specifics and reason it can said that, marmashrita sira i.e. katiktaran sira should not be punctured and it is stated in the seventh adhyaya of Sushrutasharirsthan. Here, it can be taken as superior and inferior gluteal vessels, it can be concluded that these are avedhya sira.

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