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Review Article

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ROLE OF APANA VAYU AS PRASUTA MARUTA

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ABSTRACT

Women is god's great creation, As she plays important role in continuation of life. Our classics also state that man without progeny is called nindaniya^[1] one woman feels complete when she becomes mother. So, pregnancy is most pleasureful phase of life. And this phase completes with safe normal labor, for this normal labor various factors are responsible. *Apana vayu* is one among them. *Prasuta maruta* is *apana vayu*, It is called so because during labor *apana vayu* is actively involved in delivering the foetus, hence termed as *prsava maruta* owing to its function during labor. Stages of labor cannot progress properly without proper support of *prakrut apana vayu*. As *apana vayu* plays important role in delivery as *prasuta maruta*, for keeping *apana vayu prakrut* and avoid its *vikruti* during antenatal period and labor, our acharyas have given *garbhini paricharya* and *prasava paricharya*.

KEYWORDS: Apana vayu, prasuta maruta, prasava Avastha, garbhini paricharya.

INTRODUCTION

According to Ayurveda our body composed of *Tridosha*, *Saptadhatu and Trimala*. [2] among this three *doshas vata* is more active as it is only who moves itself and carries another *doshas*. [3]

Vata dosha is described by different *acharayas*. It has five sub types i.e. *PRANA*, *UDANA*, *SAMANA*, *VYANA*, *APANA*^[4] on the basis of their *karma*, *sthana*, *gati*, *marga*.

Apana vata is sub division of vata dosha. According to acharya charaka and vagbhata apana vata resides in apana pradesh i.e. below the kati pradesha and it moves in basti ,shroni, medra, vrishana (acts on mutramarga, shukravaha strotas and aratvavaha strotas) and uru area. Where Acharya Sushruta states apana vata resides in pakwadhana. and it causes the excretion of feces, urine, fetus, semen, and menstrual blood. [6]

For quick comprehension the location and function of *apana vata* according to different *acharyas* can be tabulated here as under

	Sthana	Karma
CHARAKA	Vrushana, basti, medra, nabhi, uru,	Excretion of shukra, mutra,
SAMHITA ^[7]	vankshana, guda	purisha, artava, garbha
SUSHRUTA	Pakwadhana	Excretion of mala, mutra,
SAMHITA ^[8]		samirana, shukra, Garbha, artava
ASHTANG	Resides in apana Pradesh & acts on kati,	Excretion of shukra, artava, mutra,
HRIDAYA ^[9]	basti, medra, uru	garbha
ASHTANG	Resides in apana pradesha & acts on basti,	Excretion of purisha, mutra, mutra,
SANGRAHA ^[10]	sroni medra, vrushan, vankshana , uru	sukra, artava, garbha

So, over and all letting go outside of the body i.e. excretion is main function of *apana* vayu.

Garbha nishkramana- is meant for parturition which means birth of baby. Which is main aim of normal labor or *prasava*.

Acharya Charaka mention that during the onset of normal labor due to *prasava maruta* i.e. apana vata the foetal head turns and come forward before being expelled through vaginal passage. This is normal and other presentation, lie, position etc. is abnormal. After delivery, foetus is independent for its nourishment.^[11]

Same statement is given by acharya *Vagbhata*, in *Ashtang Sangraha*. ^[12] It means *apana vata* leads to onset of labor.

During various prasava avasthas, apana vayu plays role as^[13]

I. Aasanna prasava- (1st stage of labour)

Mentioned in Charaka samhita^[14] Ashtang sangraha^[15], Ashtang hridaya^[16], Kashyapa samhita^[17] and Bhavkrakasha.^[18]

In this stage clinical features are: pain in groin, bladder, sacrum, hips, flanks, back; vaginal discharge: labour pain with discharge of liquor; exhaustion; fatigue; pricking and tearing pain in vagina; frequency micturition.

II. *Upasthita prasava* – (end of 1st stage & commencement of 2nd stage of labour)

Mentioned in Sarvangsundar (tika by Arundatta on Ashtang Hridaya) and Sushruta Samhita.

Arundatta says that with foetus turning or directed towards yoni, onset of labor pain, leaking of liquor.^[19]

And acharya Sushruta mentions: Pain in back, sacral region. around the back or hip region, defecation, micturition with mucosal vaginal discharge.^[20]

III. $Parivartit / Avak - (2^{nd} stage of labour)$

Mentioned in Charak samhita^[21], Ashtang sangraha^[22], Ashtang hridaya^[23], Kashyapa samhita.^[24]

In this stage clinical features are: Foetus is descending further into lower abdomen up to neck of bladder, uterine contractions (*avi*) are strong, frequent and duration of labour pain increases, tearing pain in vagina.

IV. Aparapatana Avastha

There is no direct reference of this stage in our classics but all acharya mentioned in general manner.

Acharya Vagbhata-I has defined normal labour as delivery of foetus followed by expulsion of placenta.^[25]

Acharya Kashyapa says that without expulsion of placenta women cannot be called *sutika*. ^[26] In other words, *prasava* is complete only with expulsion of placenta.

As we can clearly see all the above-mentioned features are under dominance of *apana vata* as pain in *apana vata sthanas, mutra nishkraman (micturition), malanishkramana (defecation)* and finally *garbha* and *apara nishkramana*. As this all actions are main function *of apana vayu*.

According to modern science

Definition of labor is series of events that take place in genital organ in an effort to expel the viable product of conception out of womb through vagina into outer world.^[27]

And it is called normal when it fulfills criteria^[28]

- a) Spontaneous onset at term
- b) With vertex presentation
- c) Without undue prolongation
- d) Without having complication.

In various stages of labour^[29] i.e. in 1st stage (dilatation of cervix), in 2nd stage of labor (expulsion of foetus) and in 3rd stage of labour (expulsion of placenta) we can corelate function of *apana vata* as dilatation, expulsion is occurred under the influence of *apana vayu*.

Mechanism of normal labour^[30] is The series of movement that occur on head in the process of adaption during its journey through pelvis. The principal movements are

- 1. Engagement
- 2. Descent
- 3. Flexion
- 4. Internal rotation
- 5. Crowning
- 6. Extension
- 7. Restitution
- 8. External rotation
- 9. Expulsion of the trunk.

These all above mentioned movements are speed actions which cannot be happen without support of *vata* and specially this all movements taken place in *apana pradesha* i.e. below the *katipradesha* in the process of *garbha nishkramana*. So, one can say this all movements under mechanism of labour are influenced by *apana vata*. Hence, we can call *apana vayu* plays important role as *prasuta maruta*.

Up to this we see the role of *prakruta apana vayu*, what if it becomes *vikruta*??

If apana vayu become vikruta then it is unable to perform its prakrut karma like garbha, purisha and mutra nishkramana and it may lead to kalatit prasuti, akal prasuti or during labour, it may cause garbhasanga, mudhgarbha or aparasanga.

In Harita Samhita, it is clearly mentioned that due to *vata samprerana*, *akal prasuti* happens^[31] and here we know that it is *kshetra* and *karma* (*garbha nishkramana*) of *apana vayu* likewise vitiation of *vata* also cause *kalatit prasuti* and *vilambit prasava*.

During labor if apana vayu gets vitiated then it causes mudhgarbha, garbhasanga and aparasanga.

Aggravated *vata* makes the foetus to be disoriented hence it is called as *mudhgarbha*^[32] *Acharya Sushruta* states that this incomprehension occurs after attaining physical maturity and psychological and intellectual development due to *apana vayu*^[33] In the extension of definition of *mudhgarbha* they mention that it should satisfy one or more following features

- Vivridham
- Asamyaga agata
- Apatya-pathamanupraapta anirasyamaanam
- Viguna apana mohita^[34]

And the *samanya lakshana* of *mudhgarbha* is^[35]

- Garbha mudhatva dis-orientation of foetus
- *Yonishula* pain in vagina
- Jathar shula pain in abdomen
- Kati shula pain in back
- Mutrasanga retention of urine

Here this all lakshanas clearly indicates vikruti of apana vayu (stana and karma).

Among four classical varieties of *mudhagarbha* one is *viguna apana mohita mudha garbha*, the word *mohita* represents stupefaction or unconsciousness of foetus which can be considered as fetal distress. The uncoordinate uterine contraction caused by vitiated by *apana vata* or preferably *prasuta maruta* leads to condition like exhaustion and asphyxia making the foetus to be *mohite* and *murchita*.^[36]

For delayed labour altered physiology of different organs leads to *vata vaigunya* specially *apana vata vaigunya* further complicating uterine contractions and fetal descent thus leads to *mudhgarbha*. *Apana vata vaigunya* also leads to *apathyapatha vikruti*.

Acharya Kashyapa defined sutika as women after expulsion of apara following delivery of foetus, demarcating the apara patana as part of delivery. [37] As we know the expulsion from apana pradesha (i.e below the kati pradesha) is karma of apana vata.

So, retention of placenta i.e. *aparasanga* is also due to *apana vata vaigunya*. And it leads to *vata sanga*, *mutra sanga*, *purisha sanga*^[38] and *anaha*, *adhmana*. This all *lakshanas* shows dominance of *apana vata vaigunya* (*karma*). In *Ashtanga* Hridaya in context of principal of treatment of *aparasanga* it is stated that the main etiological factor for *aparasanga* is vitiation of *vata* and pacification of *vata* is the principal treatment of retained placenta. In *Charaka Samhita* it is mentioned that *asthapana vasthi* facilitates *anulomana* of *vata* which causes *aparapatana*.

DISCUSSION

Apana vayu vikruti happens due to vikrut ahara-vihara sevana .So, to keep apana vayu prakrut and avoid its vikruti in Garbhiniavastha, in our ancient texts some regimens are given by different achrayas.

Garbhini paricharaya is given by different *acharaya* and in this they described *ahara* & *vihara* for well growth and development of fetus, for wellbeing of mother and most important for balance of dosha & dhatus.

While following this *garbhini paricharya* in first trimester use of fluid, milk, honey, ghrita, sweet diet maintains the *vata*, avoids miscarriage and maintains the pregnancy.

In second trimester use of butter, milk, *ghrita*, *jangal mamsa* is indicated. Four month onwards muscular tissue of fetus grows sufficiently requiring more protein which is supplied by meat soup. In Kashyap Samhita it is stated that *mamsa rasa* helps achieving conception, nourishment, and *vata shamana* and it is considered very good in pregnancy.^[42]

In third trimester, according to *Sushruta* in eighth month for clearing long term constipated and retained feces and for *anulomana of vayu*, *the asthapana vasti* should be given with decoction of *badri* mixed with *bala*, *atibala* etc.^[43]

In nine-month *acharya Charaka*^[44] and *Vagbhata* mentions use of *anuvasana vasti* with oil prepared with *Madhura* group and yoni pichu of oil should be given for lubrication of *garbhasthanamarga* (vaginal tract); as this help in relaxation of perinium and results in normal labour. And *acharya Sushruta* told *asthapana* for *anulomana* of *vata*.

Overall, we all know that *Madhura*, *snigdha* are the opposite *guna* of properties of *vata*. Hence, help in *vatashaman* and avoid *akala prasuti* and *vasti* is best treatment for *vata*, here it helps in *vatanulomana* for *sukh prasava*.

During *prasava avasthas*, on ensuring the onset of labour, women is given massage with oil followed by bath by *ushna jala*. Massage over infra umbilical region, back, flanks and upper thigh region was advised by almost all *samhitas*. Oil should be massaged all around the vaginal canal. As we can understand this all are the places of *apana vayu*.

These are some DO's for maintenance of *prakruta vayu* and there is some DON'Ts to avoid *vikruti* of *vayu* like, *vyavaya*, *ratrojagaran*, *uccha bhashana*, *vega dharana*, *utkata asana* etc.

As utkata, visham asana; vata mutra purisha vegadharana; daruna anuchita vyayam sevan; atimatra sankshobh yanavahana this all causes vataprakopa and further leads to akala prasuti, sansrana, shosha.^[45]

Likewise, during *prasava avstha* acharya Charaka asked to avoid *daruna vyayama* i.e. vigorous exercise as the *dosha* and *dhatu* are mobile, this type of exercise and exertion in *sukumari* woman may aggravates *vayu* killing the woman after reaching the hollow spaces.^[46]

CONCLUSION

Apana vayu plays important role in prasava as prasuta maruta. As in various stages of labour nishkramana, avi (Vedana) this are the clearly mentioned lakshanas of apana vayu. Prasava i.e. labor process (garbha nishkramana) is karma of apana vayu and it is taking place in site of apana vata i.e. apana pradesha (below the kati pradesha.). if it is prakruta

then it causes sukh prasava; and if it is become vikruta then it causes kashta prasava i.e. akal, kalatit prasava, garbhasanga, aprasanga etc.

So that our acharya described some specific thing in garbhini paricharya and prasava paricharya to avoid and to follow, for maintenance of vayu so as to continue preganancy and to deliver baby in accurate time and without any complication i.e. sukha prasava. During this present era also for sukh prasava we have to follow these things like to avoid vatakara ahara (ati ruksha ahara like dried, frozen food etc.), vatakara vihara (ratro jagarana, travelling etc.), manasika bhava like stress, anxiety etc.

As now a days we can see the increasing number of C-section than normal labour as women is not following the proper regimen of garbhini paricharaya. It may be probable reason as it leads to apana vayu vikruti which further causes prasava vyapada.

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