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Case Report

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EVIDENCE FOR INCREASE SPERM COUNTS BY AYURVEDIC FORMULATION A CASE REPORT

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INTRODUCTION

Infertility is one of the significant problems in medical sciences. Infertility is the absence of pregnancy after 1 year's sexual intercourse without using contraception.[1] One pair in every 6 couples encounters infertility during their life.[2] According to World Health Organization reports, 80 million suffer from failure of pregnancy. About 15% of couples after 1 year are still infertile.[3] Infertility in men is 7%, which is common.[1] Idiopathic male infertility is a condition where abnormal semen parameters are obtained due to nonspecific causes. In the majority of cases, abnormal semen parameters lead to diagnosis of oligoasthenoteratospermia, and in others, it leads to isolated abnormalities of sperm concentration, motility, and morphology. There are several causes for male infertility such as congenital disorders (testicular dysgenesis, cryptorchidism, etc), acquired disorders, genitourinary (obstruction, tumor and testicular torsion, genitourinary tract infections, increase scrotal temperature), endocrine disorders, genetic disorders, immunological factors, systemic diseases, and external factors (medications, toxins, radiation, etc). Up to 30% to 45% of infertile men have unexplained causes (idiopathic).[3,4] Idiopathic male infertility is a global problem with almost no definite medicinal treatment. Most patients have to go through intrauterine insemination or assisted reproductive technology for achieving fertility. Unfortunately, success rates are low in cases with very low sperm count. Therefore, it seems that improvement in sperm quality can have beneficial effects on assisted reproductive outcome. Ayurvedic formulation has very potential to increase and produce quality sperm. Most pharmaceutical industries attracted toward ayurvedic drugs because it uses is safe due to less adverse effect and remarkable significant results. Nevertheless, though it should be always used under observation of physician.

According to World Health Organization classification, normal semen specification is:
Semen volume ≥1.5 mL
Total number of sperms per ejaculation ≥39 million
Sperm concentration per millilitre ≥20 million
Total movement ≥50%
Sperm morphology (normal forms) ≥30%[5]
Oligozoospermia: That is, reduction of sperm count,
Asthenozoospermia: motility of sperm decreased,
Teratozoospermia: shape of sperm is abnormal.

The drug which increases *Shukra* (sperm) is known as *Shukrala*, as *Ashwagandha* (*Withania somnifera)*, *Shatavari* (*Asperagus racemosus*) *Mushali* (curculigo orchioides).[6]

Withania somnifera (Ashawagandha) is very revered herb of the Indian Ayurvedic system of medicine as a *Rasayana* (tonic). It is used for various kinds of disease processes and specially as a nervine tonic. It improves the function of the reproductive system promoting a healthy sexual and reproductive balance.

Asperagus racemosus is a well-known Ayurvedic rasayana which prevent ageing, increase longevity, impart immunity, improve mental function, vigor and addvitality to the body and it is also used in nervous disorders, dyspepsia, tumors, inflammation, neuropathy, hepatopathy.

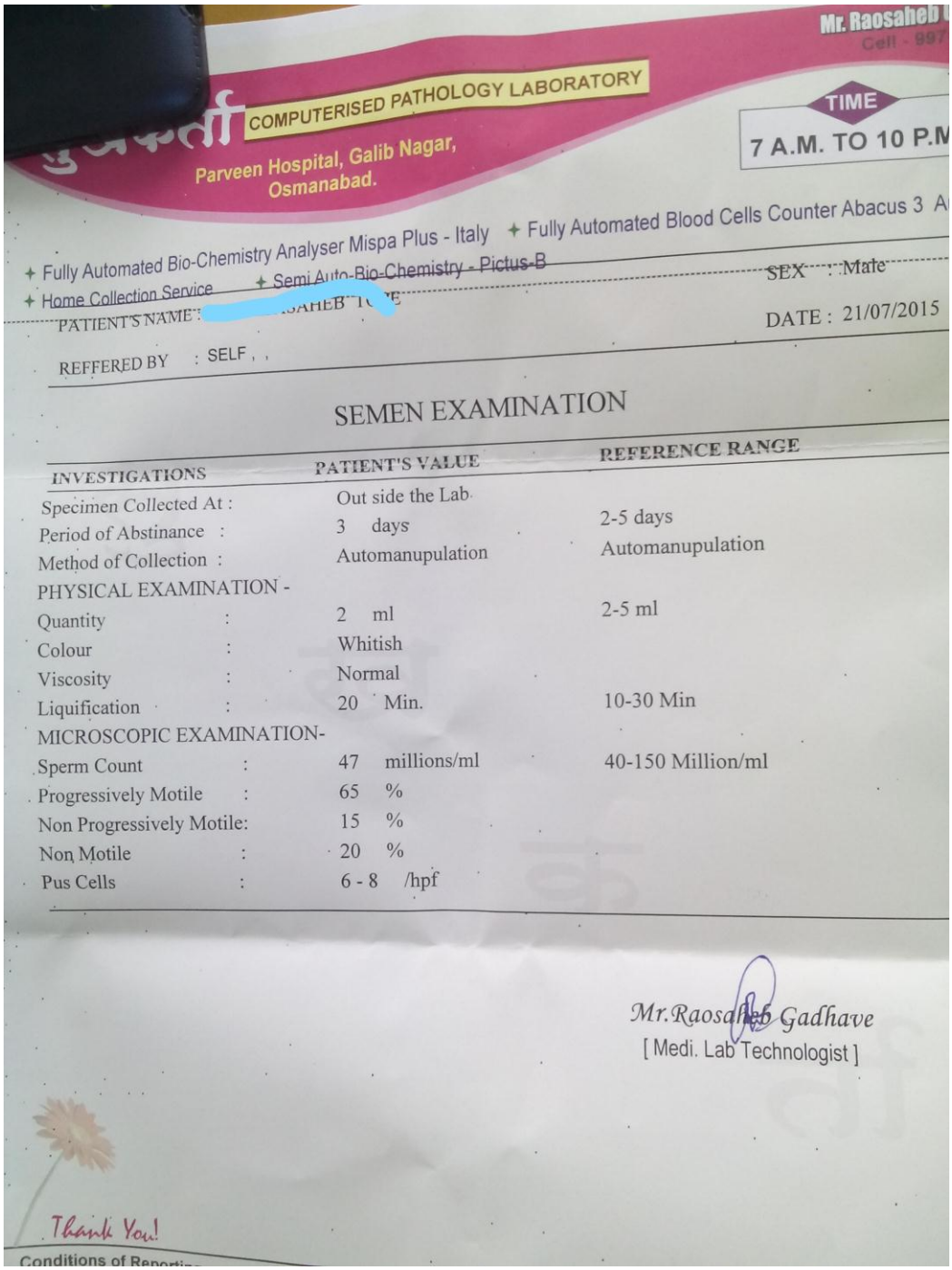
Safed musli (Chlorophytum Borivilianum L.) is a very popular aphrodisiac agent, with no side effects. It is often prescribed for enhancing male potency and overcoming signs of fatigue. It is particularly used for individuals with low sperm count and low libido.

Low sperm count, decreased quality and motility reduce succession of assisted reproductive technology; in case of pregnancy, the risk of abortion is increased compared with general population. With regard to above, an effective treatment method for clinicians and researchers has a great value.

CASE REPORT

A 30-year-old man with history of infertility for 3 years was referred to the ayurvedic hospital. The patient's wife is healthy. In his past medical history, mumps in childhood, smoking, alcohol, drugs, and surgery were negative. His sperm analysis showed 28 million/ml and motility 55%.

The patient was put on traditional medicine, treated with 1) *Ashwagandha churna* 4gm BD, 2) *Shatavari churna* 4gm BD, 3) *Safed Mushali churna* 4gmBD with milk were taken for 12 weeks because spermatogenesis takes 75 days. The patient had no complications during the treatment. After taking ayurvedic formulation he had a remarkable improvement in his sperm count 47 million/ml and motility 65%.



COMPUTERISED PATHOLOGY LABORATORY

Parveen Hospital, Galib Nagar, Osmanabad.

TIME 7 A.M. TO 10 P.M

✦ Fully Automated Bio-Chemistry Analyser Mispa Plus - Italy ✦ Fully Automated Blood Cells Counter Abacus 3

✦ Home Collection Service ✦ Semi Auto-Bio-Chemistry - Pictus-B

PATIENT'S NAME : [redacted] SEX : Male

REFFERED BY : SELF DATE : 21/07/2015

SEMEN EXAMINATION

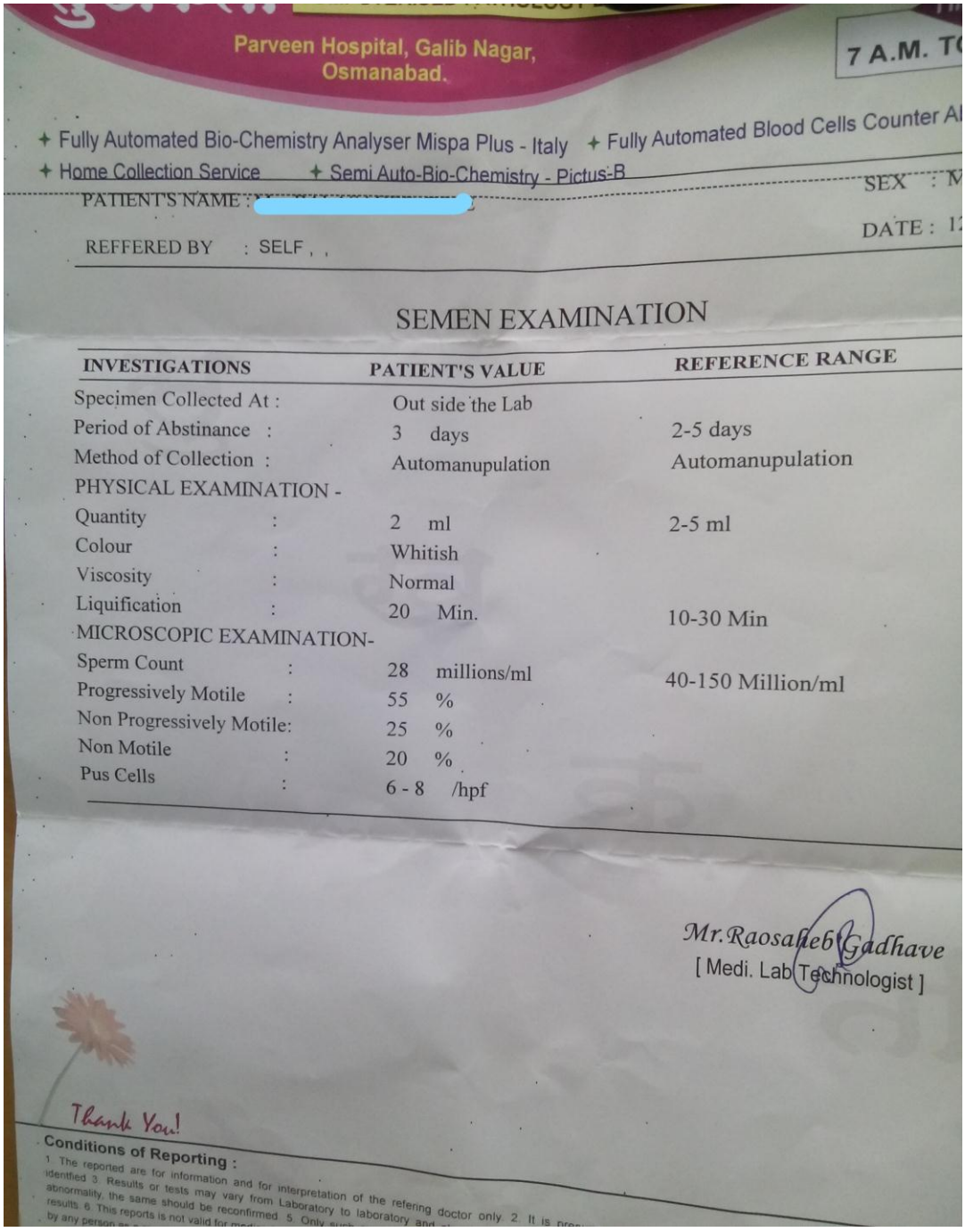
INVESTIGATIONS	PATIENT'S VALUE	REFERENCE RANGE
Specimen Collected At :	Out side the Lab	
Period of Abstinance :	3 days	2-5 days
Method of Collection :	Automanupulation	Automanupulation
PHYSICAL EXAMINATION -		
Quantity :	2 ml	2-5 ml
Colour :	Whitish	
Viscosity :	Normal	
Liquification :	20 Min.	10-30 Min
MICROSCOPIC EXAMINATION-		
Sperm Count :	47 millions/ml	40-150 Million/ml
Progressively Motile :	65 %	
Non Progressively Motile:	15 %	
Non Motile :	20 %	
Pus Cells :	6 - 8 /hpf	

Mr.Raosaheb Gadhave

[Medi. Lab Technologist]

Thank You!

Conditions of Reporti



Parveen Hospital, Galib Nagar, Osmanabad.

7 A.M. T

✦ Fully Automated Bio-Chemistry Analyser Mispa Plus - Italy ✦ Fully Automated Blood Cells Counter A
✦ Home Collection Service ✦ Semi Auto-Bio-Chemistry - Pictus-B

PATIENT'S NAME : [redacted] SEX : M

REFFERED BY : SELF , , DATE : 1

SEMEN EXAMINATION

INVESTIGATIONS	PATIENT'S VALUE	REFERENCE RANGE
Specimen Collected At :	Out side the Lab	
Period of Abstinance :	3 days	2-5 days
Method of Collection :	Automanupulation	Automanupulation
PHYSICAL EXAMINATION -		
Quantity :	2 ml	2-5 ml
Colour :	Whitish	
Viscosity :	Normal	
Liquification :	20 Min.	10-30 Min
MICROSCOPIC EXAMINATION-		
Sperm Count :	28 millions/ml	40-150 Million/ml
Progressively Motile :	55 %	
Non Progressively Motile:	25 %	
Non Motile :	20 %	
Pus Cells :	6 - 8 /hpf	

Mr. Raosaheb Gadhave
[Medi. Lab Technologist]

Thank You!

Conditions of Reporting :
1. The reported are for information and for interpretation of the refering doctor only. 2. It is
identified 3. Results or tests may vary from Laboratory to laboratory and
abnormality, the same should be reconfirmed 5. Only
results. 6. This reports is not valid for
by any person

DISCUSSION

Use of ayurvedic traditional medicine and herbal remedies for treatment of diseases such as infertility has a historical background. On review of literature on *Vrushya* drugs *Bhrihatatrayi* did not emphasize ashwagandha as *vrushya* when used individually in their works but *Sharangadhara* highlighted the *Shukrala* property of Ashwagandha along with *Safed Mushali* and *Shatavari*. From medieval period onward Ashwagandha emerged as a general tonic and aphrodisiac According to Avicenna and Canon of Medicine, healthy semen is the consequence of a good performance of brain, heart, liver, testes and healthy stomach and kidney, so health and strength of brain, and so on, is effective on semen production.[7] *Safed Mushali* and *Shatavari* were increased sperm count by its rasa, virya, vipaka. According to the results obtained for our case, using *Ashwagandha ,Shatavari, Safed Mushali* were increased sperm count and motility. The outcome of this treatment reveals such ayurvedic formulation lead to a very good consequence for infertile patients. It might be that an extended duration of treatment can lead to better results and also having the semen analysis repeated during the treatment can yield evidence of its effects. It seems that combination of Ayurvedic formulation therapy can be beneficial in obtaining better result in treatment of male infertility; however, more clinical trials are mandatory.

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