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Knowledge of Floating

Adrenal Selectivity in Lung

Highlights

Evaluation of the Effect

Hormonal and Mineral Changes

Discovering Thoughts, Inventing Future

VOLUME 16 ISSUE 2 VERSION 1.0



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Knowledge of Floating Population on Fearfulness of HIV/AIDS: A Case Study of Three Metropolitan Cities in Bangladesh

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Abstract- This study has used mainly primary data and information collected from the survey of 300 floating population with the help of an interview schedule through quota-sampling technique has also been used in this study. To have performed the analysis Multiple Binary Logistic Regression Models along with as usual descriptive statistical tools and techniques have been applied in the study. The study revealed that 92 percent floating respondents had heard the name of HIV/AIDS but 52 percent floating respondents did not know the fearfulness of HIV/AIDS. TV (29%) was the most dominate source of hearing about HIV/AIDS. Respondents also knew that using condom during intercourse was only the safety way to avoid HIV/AIDS. It was expected that the result of this study will play a vital role to reassess the national population policy in line with the prevention of HIV/AIDS in Bangladesh and will help policy makers to formulate better policies in order to fight against the current situation. However, there was a real need for more and more studies on this regards. Thus, necessary action was to be taken to reduce the level of HIV/AIDS in the country in order to achieve better living conditions in future.

Keywords: knowledge, HIV/AIDS, floating population and bangladesh.

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Knowledge of Floating Population on Fearfulness of HIV/AIDS: A Case Study of Three Metropolitan Cities in Bangladesh

Dr. Prosannajid Sarkar ^α, Dr. Chanchal Kumer Mondal ^σ, Dr. Md. Abu Hanifa ^ρ, Md. Abdullah-Al-Faruk ^ω,
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Abstract- This study has used mainly primary data and information collected from the survey of 300 floating population with the help of an interview schedule through quota-sampling technique has also been used in this study. To have performed the analysis Multiple Binary Logistic Regression Models along with as usual descriptive statistical tools and techniques have been applied in the study. The study revealed that 92 percent floating respondents had heard the name of HIV/AIDS but 52 percent floating respondents did not know the fearfulness of HIV/AIDS. TV (29%) was the most dominate source of hearing about HIV/AIDS. Respondents also knew that using condom during intercourse was only the safety way to avoid HIV/AIDS. It was expected that the result of this study will play a vital role to reassess the national population policy in line with the prevention of HIV/AIDS in Bangladesh and will help policy makers to formulate better policies in order to fight against the current situation. However, there was a real need for more and more studies on this regards. Thus, necessary action was to be taken to reduce the level of HIV/AIDS in the country in order to achieve better living conditions in future.

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I. INTRODUCTION

Acquired Immune Deficiency Syndrome (AIDS) was caused by the Human Immunodeficiency Virus (HIV). It weakens the immune system and makes the body susceptible to and unable to recover from other opportunistic diseases. Consequently it was one of the main causes of death of human being and world wide wreaking devastation on millions of population communities. AIDS was the late clinical stage of

infection with the HIV. The virus was generally transmitted through sexual contact, infected women to their unborn children, or through contaminated needles (infections) or blood [1]. It poses a serious challenge to human kind and at present AIDS/HIV has increasingly become a major public-health concern in many developing countries like Bangladesh [2]. According to Huda et al. report and recent UNAIDS [3-6] statistics on the global AIDS epidemic estimates that globally, 34.0 million (31.4 million - 35.9 million) population were living with HIV at the end of 2011. It also asserts that an estimated 0.8% of adults aged 15 - 49 years worldwide were living with HIV [4-5]. Bangladesh was geographically vulnerable to HIV/AIDS due to its close proximity to India, Myanmar, Nepal, and Thailand having various degrees of the epidemic [7]. In 2011 the National AIDS and STD Program (NASP) in Bangladesh informed that there were 445 newly reported cases of HIV and 251 new AIDS cases, out of which 84 population had died [8]. Thus, the cumulative number of reported HIV cases to date in Bangladesh stands at 2533, AIDS cases at 1101 and death toll at 3258 [5]. HIV/AIDS also has become national concern in Bangladesh and the government has already developed a national strategy and an operational plan to address the countries needs [6]. But Bangladesh Govt. has no special plan about floating population regarding HIV/AIDS issues. Floating population means a group of population who frequently move from place to place that was not permanently resident in a place [9]. In Bangladesh, there were many floating population live under the poverty line, and floating women forms a large and vulnerable group suffering from high level of economic insecurity, and there were great socio-economic variations within the floating population which make the care for the floating more complex and challenging. This situation throws the floating population, particularly the slum area population of the poor families into large-scale economic insecurity. Most of the time, we draw a conclusion that these population were involved in all types of anti-social activities like drug peddling, snatching and theft. In fact, many of them were indirectly contributing a lot to our city life. They were the population who collect waste, work as

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construction laborers, sell vegetables, and pull rickshaw or van. Their exact number was not known. However, since migration from rural to urban areas continues rapidly, this number was likely to grow in the coming days. Lack of opportunities in the rural areas and their lack of willingness to work in rural areas force this population to come to the city. It was very much necessary to deal with this problem besides many other problems of the city like traffic congestion, environment pollution, potholed roads, and water logging etc. Beside they were suffering from various diseases like HIV/AIDS. To meet the targets and goals of AIDS prevention and control, there was a strong need to assess the current levels of specific knowledge about AIDS transmission and prevention by various residence and other key socio-demographic factors. In this context, the study was conducted on knowledge level of floating population on HIV/AIDS in some selected areas of Bangladesh.

II. OBJECTIVE OF THE STUDY

The present study focuses on-

1. To assess the knowledge level of Bangladeshi floating population about HIV/AIDS;
2. To determine the knowledge levels of Bangladeshi floating population about fearfulness of HIV/AIDS;
3. To identify the socio-demographic factors related to knowledge about the fearfulness of HIV/AIDS;

The distributions of sample were given below:

Table 1: Details Sample size:

Division						N
Dhaka	*Nos.	Rajshahi	*Nos.	Chittagong	*Nos.	
Kamlapur	16	Seroil	10	Chittagong Station	10	
Demra	10	Court	10	Coxbazer	10	
Shahbag	12	RU Station	10	Ramu	10	
Sadarghat	10	RU	05	Uthia	09	
Tongi	10	Alupathi	10	Patenga	11	
Airport	10	Padma Dam	10	Coxbzer	12	
Gabtali	07	Terminal	10	Rangamathi	08	
Norsingdi	05	Parbatipur	10	Bibirhat	10	
Maymonsingh	10	Rangpur	10	Noakhali Station	10	
Jinjira	05	Hili	10	Sitakunda	05	
Airport	05	Santaher	05	Santirhat	05	
100			100		100	300

Notes: *Nos. means the number of respondents, RU=Rajshahi University

IV. METHODOLOGY

To have performed the analysis on the data sets and derived the findings, Multiple Binary Logistic Regression Models along with as usual descriptive statistical tools and techniques have been applied in the study.

4. To investigate the factors related to knowledge about the HIV/AIDS prevention;

III. DATA SOURCES AND METHODOLOGY

The present study interviewed 300 floating respondents consisting of 227 males and 73 females to have collected primary cross-section data from three metropolitan cities (Dhaka, Rajshahi and Chittagong) of Bangladesh in details Table 1. The study applies quota-sampling technique to collect necessary data because poor population of metropolitan areas moves one place to another for their daily work. Another reason to apply quota-sampling technique was that floating population was not stable for long time in a place. Due to unavailability of floating respondents regarding HIV/AIDS issues this study took under consideration 300 floating residents' data from three metropolitan city corporations. The pieces of information were collected on the basis of structured question from floating population. Only 18 and over aged person's concepts about HIV/AIDS knowledge were accepted in this study. The total numbers of respondents (300) were floating respondents and interviewed during 1st October to 20th December, 2008.

a) Measurement of fearfulness

Here, fearfulness means knowledge level of floating population about HIV/AIDS issues. For measurement of fearfulness, it considered five questions from all questionnaires. If he/she answered correct five questions regarding HIV/AIDS issue then they had knowledge of fearfulness about HIV/AIDS, otherwise they had no idea about fearfulness of HIV/AIDS.

V. RESULTES AND DISCUSION

a) Socio-economic characteristics of floating population

Socio-economic and demographic characteristics of the study population were essential for interpretation of collected data and examination of any cause-effect relationship among different variables. Some table provides the descriptive summary of some selected socio-economic and demographic

characteristics of the study population. From Table 2 we observed that the majority (54%) of the respondents in floating category were in age 38 years. The professional characteristics were the subject matter analysis which influences the socio-economic performance and identification of issue of HIV/AIDS in Bangladesh. Table 2 presents in floating category majority of the respondents (33.7%) occupation were day labor. We also observed that floating married respondents contain a significantly higher percentage.

Table 2 : Selected socio-economic characteristics of floating respondents

Characteristics	Floating Population (N=300)
Age (in years)	
18-27	58 (19.3)
28-37	80 (26.7)
38+	162 (54)
Occupation	
Rickshaw Puller	54 (18.0)
Service	-
Business	37 (12.3)
Truck Driver	-
Day labour	101 (33.7)
Agriculture	-
Beggar	90 (30.0)
Sex worker	18 (6.0)
Marital Status	
Single	40 (13.3)
Married	215 (71.7)
Widow	21 (7.0)
Widower	24 (8.0)

Notes: N= number of floating respondents; figure in parenthesis indicate that the percentage distribution, Single= never married, (-) not available.

Figure 1: Education was one of the most important indicators of increasing knowledge. As the education level increases, the awareness of HIV/AIDS also rises [10]. The status of literacy among different population

was shown in Figure 1. The majority of the floating respondents never attended in school. Figures 1 showed that majority of the floating respondents (56.3%) were illiterate.

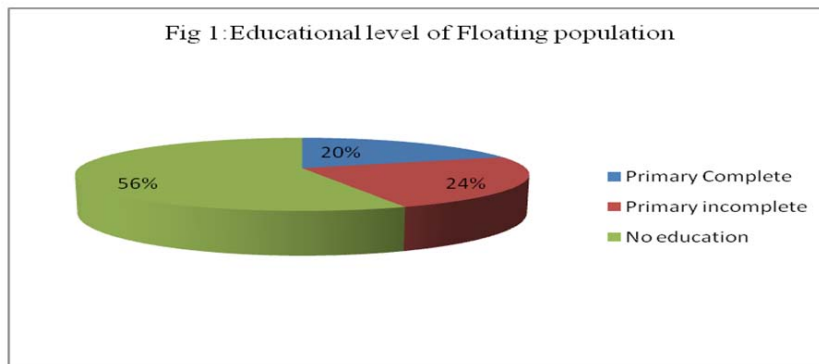


Figure 1: Educational level of Floating population

b) Knowledge about HIV/AIDS

The role of sources information about AIDS was alarm the public knowledge. The public should be reassured that HIV/AIDS was not a dangerous disease as long as the appropriate prevention measures taken. Table 3 showed that 94% floating respondents heard the name of HIV/AIDS by various sources of media but 53%

floating didn't know the fearfulness of HIV/AIDS. Also use of mass media could also be a successful strategy in reaching different population with information on HIV/AIDS, particularly those who were living in floating area. TV was the most dominate source of hearing about HIV/AIDS for floating respondents. Most of the respondents (48.3%) were known sex worker as the risk

population of HIV/AIDS. Most of the floating respondents were known HIV/AIDS as transmitted diseases. Once more, 27.3% floating respondents think sharing needles, razors/blades was the main source of HIV/AIDS spread of HIV/AIDS. Now a day, condom has been considered as popular methods of HIV/AIDS protection. When respondents were asked how way to avoid HIV/AIDS

virus, it seems that they want to rely on personal opinion about way to reducing HIV/AIDS. Table 3 pointed that more than 22 percent of floating respondents mention that by using condom during intercourse was the highest way to reduce HIV/AIDS. We also found from figure 2 that 29 percent floating population didn't talk to spouse about preventing of AIDS.

Table 3 : Respondents knowledge about HIV/AIDS

HIV/AIDS Related Information	Floating Population (N=300)
Have you heard the name of HIV/AIDS	282 (94.0)
Yes	18 (6.0)
No	
Have you known about fearfulness of HIV/AIDS	140 (46.7)
Yes	160 (53.3)
No	
Source of HIV/AIDS information	
Doesn't know	11 (3.7)
Radio	57 (19.0)
TV	86 (28.7)
News Paper	7 (2.3)
Pamphlets	5 (1.7)
Health worker	13 (4.3)
Religious Institute	2 (0.7)
Educational Institute	1 (0.3)
Community meeting	5 (1.7)
Friend	19 (6.3)
From NGO	3 (1.0)
Others	91 (30.4)
Perception of HIV/AIDS affected person	
Doesn't know	13 (4.3)
Disobedient of religious factor	10 (3.3)
Addicted	85 (28.3)
Illiterate	8 (2.7)
Truck driver	27 (9.0)
Rickshaw puller	12 (4.0)
Sex worker	145 (48.3)
Was HIV/AIDS transmitted diseases?	
Doesn't know	24 (8.0)
Yes	251 (83.7)
No	25 (8.3)
Knowledge of way to HIV/AIDS transmitted routes	
Doesn't know specific way	33 (11.0)
A mosquito bite	33 (11.0)
Illegal intercourse	68 (22.7)
Blood & Antimony	45 (15.0)
Sharing needles, Razors/ Blade	82 (27.3)
Kissing on the cheek/Touching some one who was HIV positive	7 (2.3)
Commercial Sex worker	32 (10.7)
Knowledge of ways to avoid HIV/AIDS	
To obey command of religious (i)	45 (15.0)
Abstain from sexual relation (ii)	14 (4.7)
Use condom during intercourse (iii)	67 (22.3)
Seek protection from doctor (iv)	18 (6.0)
Avoid multiple sex partner (v)	11 (3.7)
Abstain from sexual relation of prostitute (vi)	26 (8.7)
Avoid sharing, razors & blade (vii)	29 (9.7)
(i) and (iii)	51 (17.0)
(ii), (iii) and (vi)	18 (6.0)
(iii) and (vi)	21 (7.0)

Notes: Figure in parenthesis indicate that the percentage distribution and N= number of respondents

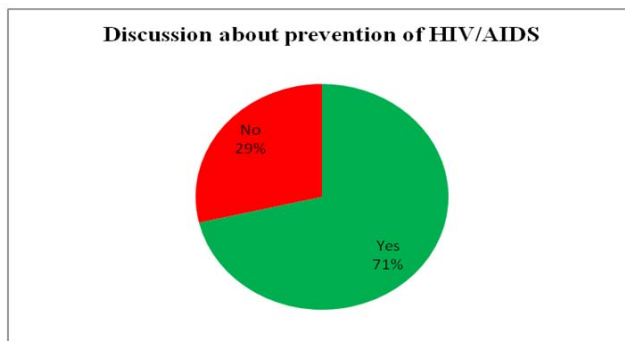


Figure 2 : Have any discussion of your spouse about prevention of HIV/AIDS

c) Determine knowledge of fearfulness about HIV/AIDS by Logistic Regression Analysis

The main focus was to determine knowledge of HIV/AIDS by logistic regression analysis. Keeping this reality in mind we have used logistic regression model.

Results of Logistic Regression Analysis: Multiple logistic regression analysis was conducted to assess the knowledge of fearfulness about HIV/AIDS as dependent variable (0= if he/she didn't know the fearfulness about HIV/AIDS and 1= if he/she knew the fearfulness about HIV/AIDS) by some selected characteristics. There were many potential independent variables. Of all the potential independent variables we considered only those of the variables which gave significant result in empirical study and that were also suitable for theoretical purpose. Here the independent variables were age, marital status, educational qualification and occupation of the respondents.

The odds ratio estimates showed that floating respondents in Table 4, population of 30-39 years were 1.50 times more likely to had knowledge about the fearfulness of HIV/AIDS; population of 40-49 years and 50+ years were 0.891 and 0.805 times less likely to had knowledge about fearfulness of HIV/AIDS than the respondents of 18-29 years age group (reference group) respectively. Here, it was worth noting that all of the estimates were found insignificant. Similarly, the covariates of marital status and occupation have been found out to put insignificant impact on the response variable of the model. Further, the respondents having primary incomplete level of schooling and primary complete level of schooling were 2.332 and 3.771 times more likely to had knowledge about fearfulness of HIV/AIDS than the respondents having no education (reference group) respectively. The low educational level persons generally had a little bit more knowledge about the fearfulness of HIV/AIDS than illiterate persons.

Table 4 : Determine knowledge of fearfulness about HIV/AIDS by Logistic Regression Analysis

Name of Independent variables	Floating Population	
	β	Odds Ratios(ρ)
Age (in years)		
18-29 (Ref.)		1
30-39	0.401	1.494
40-49	-0.115	0.891
50+	-0.216	0.805
Marital status		
Single (Ref.)		1
Married	-0.154	0.857
Widow/widower	-0.591	0.554
Educational level (in years)		
No education (Ref.)		1
Primary incomplete	0.847***	2.332
Primary complete	1.327***	3.771
Secondary & higher secondary		
Graduate & higher		
Occupation		
Rickshaw/auto rickshaw (Ref.)		1
Service		
Business	0.510	1.665
Bus/truck driver		
Sex worker	-0.180	0.836
Others	0.124	1.132

Notes: (Ref.) denotes Reference category, *** denotes 1% level of significance, β denotes estimate regression coefficient and others includes day labor, farmer and beggar.

Moreover, it was found out that the floating group of population, all the covariates except educational level had been observed to insignificantly impact the knowledge about the fearfulness of HIV/AIDS, the response variable. Therefore, to harness the level of knowledge about the fearfulness of HIV/AIDS of Bangladeshi population, proper policy implications regarding these issues deserve to be implemented for the prevention of the fatality of the killer disease AIDS.

VI. CONCLUSION AND RECOMMENDATION

HIV/AIDS and its potentially fatal impact on human beings have undoubtedly become an extremely topical issue now-a-days. The knowledge of HIV/AIDS in Bangladesh has long been a topic of interest to population research because of its apparent direct relationship with lack of health facilities and indirectly with the poverty. By running and interpreting the logistic regression analysis, this study showed that residence, education of respondents and prevention was the major factors/contributors of HIV/AIDS. At the significance level among the selected variables we have seen that more knowledge gathered on AIDS in floating population. This indicates that various socio-economic and demographic factors have played a crucial role in influencing HIV/AIDS in Bangladesh. Though it was difficult in poor setting Bangladesh, the regarding authority should take proper steps in improving the situation of education in rural areas as well as throughout the country. However, there was a real need for more in depth studies in this regard. Therefore, both government and NGO's program should strengthen care and support program may build up knowledge about AIDS and to provide the prevention through mass media by creating awareness to all population also. Thus, necessary action was called for to reduce the future level of HIV/AIDS in the country in order to achieve better living conditions in future. Therefore, there was an urgent need to develop interventions to address this gap in the current efforts to prevent a generalized HIV/AIDS epidemic in Bangladesh and fully use the window of opportunity provided by current low national HIV prevalence rates among the poor.

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Conflict of Interests

The authors declare that there is no conflict of interests regarding the publication of this paper.

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Clinical Evaluation of the Effect of Udumberadi Tail Uttar Vasti in the Management of Chronic Cervicitis

By Dr. Suneeta Singh

Abstract- Majority of the women of the world are suffering from chronic cervicitis in their child bearing age. In modern treatment chronic cervicitis is usually treated by antibiotics, improving local hygiene & vaginal pessaries but the result of this treatment are not long-lasting. In most of the cases recurrence is common. Frequency & duration of recurrence is varying upon person to person. This modern treatment also hampers the normal flora of the lower reproductive organs.

So this major issue of the society is selected for the study. In this study 10 patients of chronic cervicitis were selected for Udumberadi tail Uttar vasti. Uttar vasti with Udumberadi tail provides very good results along with the restoration of normal flora of the lower reproductive organs. The action of vasti is multifarious and the properties of udumbaradi tail are anti-inflammatory, healing, astringent, antipruritic, analgesic & tridosahar etc.

Keywords: chronic cervicitis, Uttar vasti.

GJMR-F Classification : NLMC Code: WP 475



Strictly as per the compliance and regulations of:



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Keywords: chronic cervicitis, Uttar vasti.

I. INTRODUCTION

Cervicitis is the most common disorder affecting more than half of the women population regardless of age^(11, 17). In low socio-economic status prominence of disease is more because of early marriage, aseptic abortion, lack of knowledge about hygiene, low awareness about sexually transmitted infections, lower immunity, poor knowledge about contraceptives etc^(7, 13). High-risk populations are multiple partners, adolescent women with a history of previous STIs & pregnant women⁽⁷⁾. No racial predilection exists. Chronic Cervicitis is becoming a major health problem for women. This condition has deep impact on womens' physical and mental health which disturbs her daily routine life⁽¹⁷⁾. The treatment suggested in modern science is though effective but recurrence is more common. This modern treatment also hampers the normal flora of the lower reproductive organs.

In Ayurveda, there are many curative and preventive measures for the management of Chronic Cervicitis because Ayurveda covers all the physical, mental, and spiritual aspects of human life⁽¹²⁾. Uttar vasti is the one of these ayurvedic measures^(5, 6).

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Aim and Objective: The aim of study to assess the efficacy of Udumberadi tail Uttar vasti in the management of chronic cervicitis.

Material and Method: After a detailed preliminary screening 10 patients of chronic cervicitis selected from O.P.D. and I.P.D. of Rishikul Government Ayurvedic Hospital, Haridwar. The patients were administered Udumberadi tail Uttar vasti through vagina⁽¹²⁾. The treatment was given for three consecutive menstrual cycles and in each cycle treatment given for three days⁽⁵⁾.

Following materials were adopted for present clinical trial.

II. SELECTION OF DRUGS

In heavy bleeding during menses with short cycle and chronic cervicitis, infection persisted long period, so only Bahiparimarjan is not sufficient for elimination of infection. Due to chronicity the erosion, inflammation, pain occur in uterus and cervix and persist for long time⁽¹⁷⁾. To keep these points in mind for the above complain the drug should have following properties.

1. Shothahara karma i.e. Anti-inflammatory effect.
2. Vran ropana i.e. healing effect.
3. Stambhan karma i.e. astringent effect.
4. Krimighna i.e. antimicrobial effect.
5. Rakt shodhana karma i.e. purifying effect.
6. Kandughna i.e. anti pruritic effect.
7. Shoolprashmana i.e. analgesic effect.
8. Tridosahara (especially Kaphpitta shamak drugs.)

The drugs with above effect will help in restoring the normal condition of uterus and cervix. Udumberadi tail contents having all the above properties were selected for present study after concerning various text books^(3, 5, 15). It was prepared by the same method as shown in Charaka samhita⁽⁵⁾.

III. INGRADIANTS OF UDUMBERADI TAIL

Udumber phala, panchvalkal (bark of Vatt, Pipal. Pakar, Gular, Paras Pipal), leaves of patol, malti and neem, kalk of dhava pushpa, palash, shalmali bark and laksha, til tail⁽⁵⁾.

Probable mode of action: The drug present in Udumberadi tail Uttar vasti has shothahara, vranropana, stambhana, raktshodhana, krimighna, kandughna, shoolprashaman, Tridosahar properties (3, 15). So the Udumberadi Tail applied as Uttar vasti helpful to remove sign and symptoms of chronic cervicitis (5).

Preparation and Procedure: Patient was prepared for procedure after the detailed history, physical examination, investigations and consent. Dipan-pachan aushadhi chitrakadi vati 2-tab was given at night continuously for 3 days before procedure for constipation, if required(12).

The patient was called for procedure a day after cessation of menses with light diet in the morning hours (1, 5, 12, 18). Before procedure B.P., Temperature and pulse rate were recorded carefully. Abhyanga was done with panchguna tail (2) for 20 minutes in lower abdomen, groin, thigh, buttock and back (2, 12), followed by nadi-sweda for 10 minutes. Then patient was shifted into vasti room and placed in lithotomy position (5, 16, 18). Genital parts were cleaned with panchvalkal kwath (14) to prevent surface infection go into deeper side. The tail and instruments were autoclaved. The vagina and cervix were visualized with the help of the sim's speculum (8) and an anterior vaginal wall retractor (9). The anterior lip of cervix was held with the help of Allis forceps (10). Thinnest dilator used if necessary. Then with no. 3 rubber catheter(2) already attached with 5 ml syringe filled with Udumberadi tail was introduced into the uterine cavity and pushing the medicine (Udumberadi tail) slowly. Catheter is filled with tail before inserting into the uterine cavity to minimize air passes in uterus. After procedure patient was sent to bed and observed for 2 hours for any complaint of pain, bleeding or discomfort and also for changes in the vitals. Patients were asked to avoid very spicy foods during treatment. Coitus was prohibited during the course of Uttar vasti.

Inclusion Criteria-

- Married patients,
- Patients with sign and symptoms of chronic cervicitis.
- Patients of reproductive age along with premenopausal stage (means 20-55 yrs)

Exclusion Criteria-

- Pregnancy
- Acute cervicitis
- Unmarried women and menopausal women
- HIV/VDRL/Hbs Ag /TB
- Patients suffering from complaints related to gynecological surgeries.
- Patients with bleeding disorder like hemophilia.

Assessment of Criteria: Following symptoms of chronic cervicitis (11, 17) were assessed in patients before and after the clinical trial by grade score method-

1. Unusual vaginal discharge
2. Irregular menses with heavy bleeding
3. Lower back pain
4. Frequent need to urination with or without burning and itching sensation.
5. Dyspareunia

IV. OBSERVATION AND RESULT

Table 1 : Patient wise relief in symptoms

Sr.No.	Age	BT	AT	Differences	% of relief
1	30	9	0	9	100
2	42	12	2	10	83.33
3	37	15	1	14	93.33
4	45	10	3	7	70
5	40	12	1	11	91.67
6	31	14	5	9	64.28
7	43	7	0	7	100
8	45	13	3	10	76.92
9	40	10	1	9	90
10	35	8	0	8	100

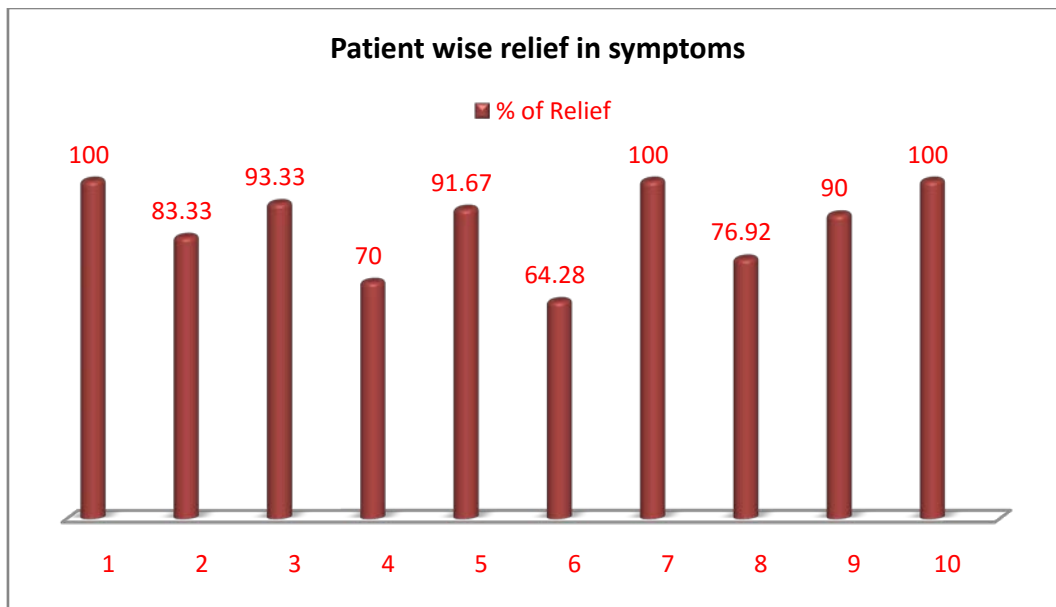
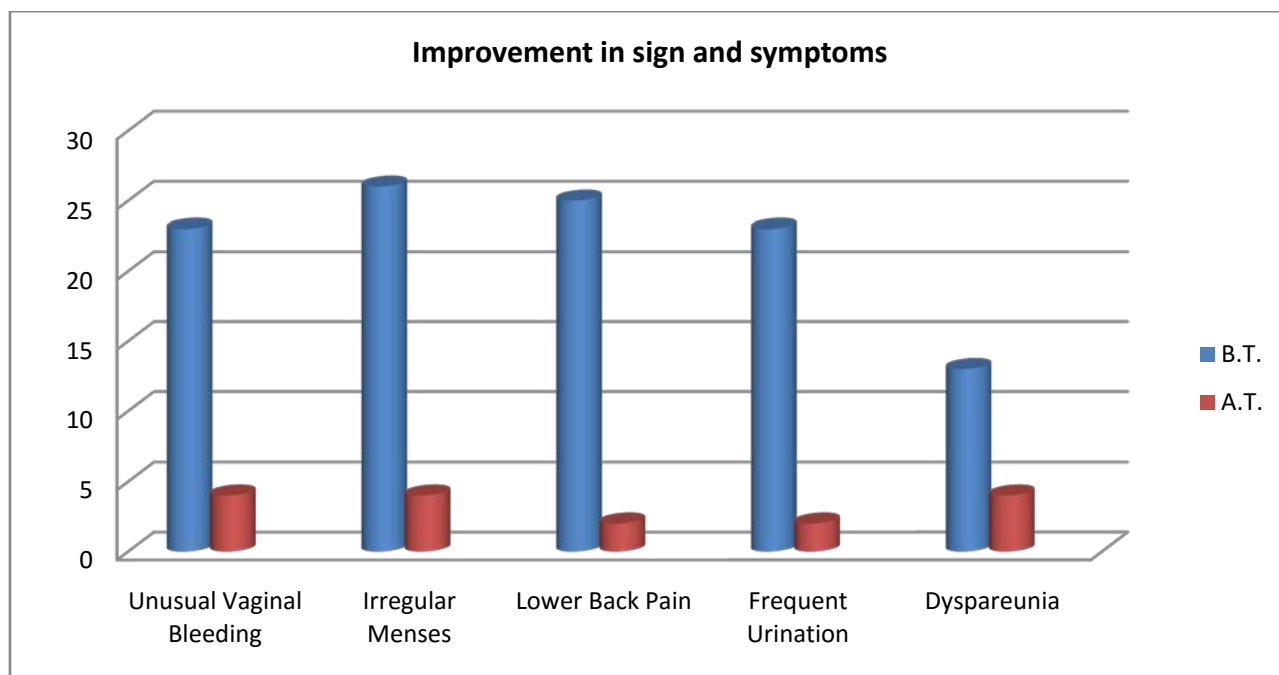


Table 2 : Results of treatment

% of relief in symptoms	90-100	80-89	70-79	60-69
Number of patients	06	01	02	01

Table 3 : Improvement in sign and symptoms of Chronic Cervicitis according to grading score ⁽⁴⁾

S.N.	Symptoms	Mean Score		Diff.	%of relief	SD +_	SE +_	t	p
		BT	AT						
1	Unusual Vaginal Discharge	23	04	19	89.61	0.737	0.233	08.142	< .001
2	Irregular Menses	26	04	22	84.62	0.632	0.200	11.000	< .001
3	Lower Back Pain	25	02	23	92.00	0.483	0.152	15.057	< .001
4	Frequent Urination	23	02	21	91.30	0.875	0.276	7.584	< .001
5	Dyspareunia	13	04	09	69.23	1.100	0.348	2.586	< .050



V. RESULTS

Total 10 patients were registered for trial. The response of Udumberadi tail Uttar vasti administration found as 89.61% relief in unusual vaginal discharge, 84.62% in irregular bleeding, 92.00% in lower back pain, 91.30% in frequent urination with or without burning and itching sensation and 69.23% in dyspareunia. These results of study prove that the patients got relief in most of the symptoms by this treatment ⁽¹⁶⁾. The daily routine life, mental calm and marital life were found improved with the course of this treatment.

VI. CONCLUSION

- Udumberadi tail Uttar vasti is very effective measure for the treatment of chronic cervicitis.
- Udumberadi tail Uttar vasti provides immediate relief in pain, unusual vaginal discharge and relieves other symptoms with regular treatment. The

treatment was given for three consecutive menstrual cycles and in each cycle treatment given for three days.

- No patient reported any side effect of this treatment.

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Hormonal and Mineral Changes in Early Stages of Chronic Kidney Diseases

By Awad Magbri, Hervas JG, Eussera El-Magbri, Mariam El-Magbri, Taha El-Magbri & Llach F

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Abstract- This study evaluates divalent ion abnormalities (DIA) and the hormonal changes throughout the spectrum of early CKD stages (1-4) as defined by K/DOQI. A total of 96 patients (48.96% males, mean age 62 ± 13 yrs) with CKD 1 to 4, were prospectively evaluated and followed-up. There were (20, 27, 32, and 17 patients in CKD-1, 2, 3, and 4 respectively). The diagnosis was confirmed by renal biopsy, Table-1. Mean serum creatinine (62 ± 32 $\mu\text{mol/L}$). Plasma levels of calcium, phosphorus, calcitriol (CTRL), and parathyroid hormone (PTH) were evaluated among the groups. A 24-hour urinary creatinine, calcium (Uca), phosphorus (Up), creatinine clearance and fractional excretion of calcium (FeCa), and phosphorus (FeP) were also compared. PTH was measured using the standard IRMA test (normal values 10-50 pg/dl), and calcitriol was measured by RIA test (normal values are 74.5 – 169 pmol/l). The exclusion criteria are nephrolithiasis, hypercalcemia, proteinuria $>3\text{g}/24$ hrs, previous renal transplant, and therapy with steroids or anticonvulsants (Phenytoin).

Keywords: divalent ion abnormality, CKD, calcitriol, secondary hyperparathyroidism, hyperphosphatemia, hypocalcemia, parathyroid hormone (PTH).

GJMR-F Classification : NLMC Code: WJ 378, WJ 300



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Hormonal and Mineral Changes in Early Stages of Chronic Kidney Diseases

Awad Magbri ^α, Hervas JG ^σ, Eussera El-Magbri ^ρ, Mariam El-Magbri ^ω, Taha El-Magbri [¥] & Llach F [§]

Abstract- This study evaluates divalent ion abnormalities (DIA) and the hormonal changes throughout the spectrum of early CKD stages (1-4) as defined by K/DOQI. A total of 96 patients (48.96% males, mean age 62±13 yrs) with CKD 1 to 4, were prospectively evaluated and followed-up. There were (20, 27, 32, and 17 patients in CKD-1, 2, 3, and 4 respectively). The diagnosis was confirmed by renal biopsy, Table-1. Mean serum creatinine (62±32 umol/L). Plasma levels of calcium, phosphorus, calcitriol (CTRL), and parathyroid hormone (PTH) were evaluated among the groups. A 24-hour urinary creatinine, calcium (Uca), phosphorus (Up), creatinine clearance and fractional excretion of calcium (FeCa), and phosphorus (FeP) were also compared. PTH was measured using the standard IRMA test (normal values 10-50 pg/dl), and calcitriol was measured by RIA test (normal values are 74.5 – 169 pmol/l). The exclusion criteria are nephrolithiasis, hypercalcemia, proteinuria >3g/24 hrs, previous renal transplant, and therapy with steroids or anticonvulsants (Phenytoin).

The serum Ca levels were not different among the four groups (Fig-1), however, urinary calcium decreased progressively from 207±11 (CKD-1) to 56±44 (CKD-4, P<0.01), (Fig-2). The urinary calcium excretion was directly correlated with CTRL; and inversely correlated with PTH, (p<0.001 and p<0.01, respectively), (Fig-3). Even though, serum phosphorus increased only in CKD-4 (p<0.01), (Fig-4), it was significantly correlated with the overall decrement of GFR (p<0.0001), (Fig-5). Likewise, the overall decrement in GFR was correlated with UP (p<0.0001), (Fig-6). Serum phosphorus has a positive linear correlation with CTRL and inversely correlated with PTH levels (p<0.0001, and p<0.001), respectively, (Fig-7, and Table -2). The Ca x P product was also positively correlated with PTH and negatively with CTRL, (p<0.001 and p<0.001, respectively), (Fig-8). As expected, there was a positive increase in PTH levels with increased CKD stage, this was significant in CKD-3 (p<0.001), (Fig-9). There was a significant correlation between GFR and PTH levels (p<0.0001), (Fig-10). Finally, CTRL levels decreased in CKD-3 (p<0.001), (Fig-11, Fig-12 and Table-3), and were overall, correlated with the decrement in GFR (p<0.0001).

Conclusion: A significant positive calcium and phosphate balance together with a deficit of CTRL develop early in CKD patients. Secondary hyperparathyroidism with divalent ion and CTRL abnormalities are important events in CKD patients

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requiring the development and implementation of preventive and therapeutic interventions to improve prognosis in CKD patients.

Keywords: divalent ion abnormality, CKD, calcitriol, secondary hyperparathyroidism, hyperphosphatemia, hypocalcemia, parathyroid hormone (PTH).

I. INTRODUCTION

Chronic kidney disease afflicts between 2.5 and 18 million Americans with millions more at increased risk for the disorder (Jones 1998, NKF 2002). The national kidney foundation (K/DOQI) classified kidney disease into 5 stages based on the estimated glomerular filtration rate (eGFR) before patients go on dialysis or for transplantation. As the GFR declines, the incidence of co-morbid conditions such as hypertension, anemia, left ventricular hypertrophy, mineral and bone disorders (CKD-MBD) increase.

Disturbances of bone and mineral metabolism are common in CKD. Increase in serum phosphate and decrease in 1, 25-dihydroxyvitamin D₃ occur early in the course of the disease (GFR<60 ml/min/1.73m²), whereas hypocalcemia is a relatively late finding (GFR<20 mL/min/1.73 m²).

The pathophysiology of CKD-MBD involves many feedback loops between the intestine, the kidney, and the vasculature to maintain calcium and phosphorus balance. While most elements of CKD-MBD are usually present when the glomerular filtration rate (GFR) falls below 40 mL/min, some components may be observed earlier in the course of CKD and precede the onset of clinically detectable abnormalities in serum phosphorus, calcium, PTH, and vitamin D (Fang 2014, Pereira 2009, Sabbagh 2012, Oliveira 2010, Isakova 2011).

II. SUBJECTS AND METHODS

This study evaluates divalent ion abnormalities (DIA) and the hormonal changes throughout the spectrum of early CKD stages (1-4) as defined by K/DOQI. A total of 96 patients (48.96% males, mean age 62±13 yrs) with CKD 1 to 4, were prospectively evaluated and followed-up. There were (20, 27, 32, and 17 patients in CKD-1, 2, 3, and 4 respectively). The diagnosis was confirmed by renal biopsy, Table-1.

Mean serum creatinine (62±32 umol/L). Plasma levels of calcium, phosphorus, calcitriol (CTRL), and

parathyroid hormone (PTH) were evaluated among the groups.

A 24-hour urinary creatinine, calcium (Uca), phosphorus (Up), creatinine clearance and fractional excretion of calcium (FeCa), and phosphorus (FeP) were also compared.

PTH was measured using the standard IRMA test (normal values 10-50 pg/dl), and calcitriol was measured by RIA test (normal values are 74.5 – 169 pmol/l)

The exclusion criteria are nephrolithiasis, hypercalcemia, proteinuria >3g/24 hrs, previous renal transplant, and therapy with steroids or anticonvulsants (Phenytoin).

a) Statistical analysis

SPSS software version 9.0 was used to analysis the data. ANOVA or analysis of variance was used to compare group means when applicable.

III. RESULTS

The serum Ca levels were not different among the four groups (Fig-1), however, urinary calcium decreased progressively from 207 ± 11 (CKD-1) to 56 ± 44 (CKD-4, $P < 0.01$), (Fig-2).

The urinary calcium excretion was directly correlated with CTRL; and inversely correlated with PTH, ($p < 0.001$ and $p < 0.01$, respectively), (Fig-3).

Even though, serum phosphorus increased only in CKD-4 ($p < 0.01$), (Fig-4), it was significantly correlated with the overall decrement of GFR ($p < 0.0001$), (Fig-5).

Likewise, the overall decrement in GFR was correlated with UP ($p < 0.0001$), (Fig-6).

Serum phosphorus has a positive linear correlation with CTRL and inversely correlated with PTH levels ($p < 0.0001$, and $p < 0.001$), respectively, (Fig-7, and Table -2).

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As expected, there was a positive increase in PTH levels with increased CKD stage, this was significant in CKD-3 ($p < 0.001$), (Fig-9).

There was a significant correlation between GFR and PTH levels ($p < 0.0001$), (Fig-10).

Finally, CTRL levels decreased in CKD-3 ($p < 0.001$), (Fig-11, Fig-12 and Table-3), and were overall, correlated with the decrement in GFR ($p < 0.0001$).

IV. DISCUSSION

Phosphate retention and secondary hyperparathyroidism (SHPT) are the main biochemical abnormalities in CKD-MBD. Secondary hyperparathyroidism begins early in the course of CKD as clearly demonstrated in this study, and the prevalence increases as kidney function declines (particularly to

estimated glomerular filtration rate [eGFR] < 60 mL/min/1.73 m²). Secondary hyperparathyroidism occurs in response to a series of abnormalities that initiate and maintain increased PTH secretion (Cunningham 2011). The main abnormalities that contribute to the pathogenesis of SHPT are; i- phosphate retention, ii- decreased free ionized calcium concentration, iii- decreased 1,25-dihydroxyvitamin D (CTRL) concentration, vi- increased fibroblast growth factor 23 (FGF-23) concentration, v- the reduced vitamin receptor expression and calcium sensing receptors in the parathyroid gland.

The increased PTH concentrations becomes evident when the eGFR drops < 60 mL/min/1.73 m², CKD-3. At that time, serum calcium and phosphate concentrations are normal and remain within normal ranges until the eGFR decreases to approximately 20 mL/min/ 1.73 m² (Levin 2007). Circulating CTRL concentrations begin to fall much earlier, when the GFR is < 60 mL/min per 1.73 m² (Levin 2007), CKD-3, Fig-12, and are markedly reduced in patients with end-stage renal disease (ESRD) (Pitts 1988). The primary reason for the decline in CTRL concentration is likely an increase in FGF-23 concentration. Even though, FGF-23 was not measured in this study but its role has been demonstrated in other studies (Gutierrez 2005). Reduced functioning nephrons and hyperphosphatemia are accessory factors for the decline in CTRL (Gutierrez 2005). Hyperphosphatemia is a relatively late phenomenon (CKD-4) and may also contribute to the decline in CTRL synthesis by suppression of 1-alpha-hydroxylase enzyme, Fig-4.

Phosphate retention has long been thought to be the initial trigger for many of the components of CKD-MBD, particularly the increased PTH secretion. A tendency to phosphate retention, beginning early in CKD as the decline in GFR decreases the filtered phosphate load, is thought to play a central role in the development of secondary hyperparathyroidism (Martin 2007, NKF 2002, Kates 1997). This could not be supported by this study, Fig-4. Hypocalcemia, decreased activity of CTRL, and increased PTH gene expression have been proposed to explain how phosphate retention initially promotes PTH release (Hruska 1995, Fournier 1992, Liach 1995).

If phosphate is reduced by restricting phosphate intake in proportion to the reduction in GFR, or the use of phosphate binders in established hyperphosphatemia, these measures could prevent the rise in plasma PTH concentration, partially reverse the hypocalcemia, hyperparathyroidism, and CTRL deficiency (Liach 1995).

The secondary hyperparathyroidism is maladaptive over the long-term (Liach 1995), and the effect of PTH on phosphate balance changes as GFR declines. Since phosphate reabsorption by the renal tubules cannot be lowered below a minimum threshold,

continued PTH rise induces release of phosphate from bone can actually exacerbate the hyperphosphatemia which probably happened late in the disease process. Hyperphosphatemia also stimulates the secretion of FGF-23, which acts to suppress PTH secretion (Wetmore 2010, Saito 2005).

Plasma CTRL concentrations generally fall below normal when the GFR is <60 mL/min per 1.73 m², (CKD-3), Fig-12. Low concentrations of CTRL have also been found in some patients with higher eGFR (ie, <80 mL/min per 1.73 m²) (Levin 2007, Liach 1995, Koenig 1992, Wilson 1985, Gutierrez 2008).

The decline in CTRL is first due to increased FGF-23 followed later by reduced functioning renal mass, when GFR drops to <70 ml/min/ 1.73 m². In advance CKD, hyperphosphatemia may play a significant role (Gutierrez 2005). The hyperphosphatemia and low CTRL will have direct and indirect effect on PTH concentration. The indirect effect is achieved via decreased intestinal absorption of calcium as well as release of calcium from bone. These effects propagate hypocalcemia which stimulate PTH secretion (Hsu 1994, Silver 1986, Malluche 2002).

Through vitamin D receptors, CTRL suppress PTH transcription by the parathyroid gland (Brumbaugh 1975). By time, the VDRs concentration in the parathyroid gland decrease and along with low levels of CTRL will promote parathyroid cell hyperplasia and nodular hyperparathyroidism (Denda 1996).

More importantly, low CTRL concentration can increase PTH secretion by removing the inhibitory effect of CTRL on the parathyroid gland (Liach 1995, Slatopolsky 1984), Table-3. The administration of CTRL, on the other hand, can partially reverse SHPT both in early (Wilson 1985) and advanced kidney disease (Slatopolsky 1984).

There is also evidence that decreased responsiveness to CTRL contributes to the development of hyperparathyroidism. In particular, physiologic concentrations of CTRL may be unable to normally suppress PTH secretion, perhaps due to a reduction in the number of VDRs in the parathyroid gland (Denda 1996, Fukuda 1993). Studies in patients on maintenance dialysis reveal that the decrease in receptor density is most prominent in areas of nodular, rather than diffuse, hyperplasia (Fukuda 1993). Therefore, a reduced number of VDRs may contribute both to the progression of SHPT and to the proliferation of parathyroid cells, leading to nodular hyperplasia.

Minute changes in ionized calcium are sensed by the CaSRs in the parathyroid gland which regulate PTH secretion (Rodriguez 2005). The fall in serum calcium concentration in CKD, as sensed by the CaSR, is a potent stimulus to the release of PTH (Li 1998, Panda 2004). Decreased CTRL levels, hyperphosphatemia, and PTH resistance on the bone cause the hypocalcemia of SHPT in advanced CKD. This could not

be demonstrated in this study, as the level of total calcium is almost normal in all the stages of CKD (1-4). This apparent controversy could be explained by low ionized calcium level even in the face of normal total calcium level. PTH secretion varies inversely with serum calcium concentration (Silver 2005). Persistently low serum calcium concentrations also appear to directly increase PTH mRNA concentrations via post-transcriptional actions and stimulate the proliferation of parathyroid cells over days or weeks (Silver 2005, Wilson 1985).

The shortcoming of this study is the small sample size of patients studied and the fact that it has been carried out in one center which may not be applied widely on different ethnic groups. The measurement of CTRL, PTH, and serum calcium and phosphate are done on snap shot which may not be representative of their dynamic state in living individuals.

V. CONCLUSION

A significant positive calcium and phosphate balance together with a deficit of CTRL develop early in CKD patients. Secondary hyperparathyroidism with divalent ion and CTRL abnormalities are important events in CKD patients requiring the development and implementation of preventive and therapeutic interventions to improve prognosis in CKD patients.

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Adrenal Selectivity in Lung Cancer Metastases: Historical Highlights and Present Prospects

By Wilson Onuigbo

Abstract- Despite the scarcity of autopsy case reports in the 19th century 3 of them are abridged in order to demonstrate that none was recognized as a primary lung cancer despite the striking presence of tumor in the lung. This is explicable on the basis of the striking phenomenon of selectivity of one or both adrenal glands during colonization. Therefore, it is concluded that recognizing such peculiar cases of adrenal selectivity among present-day patients will facilitate the treatment of this fell disease. In fact, recent positive papers on both surgery and radiotherapy are illustrative of this hopeful outlook.

Keywords: lung cancer; organ selectivity; misdiagnosis; 19th century; modern treatment.

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Adrenal Selectivity in Lung Cancer Metastases: Historical Highlights and Present Prospects

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Abstract- Despite the scarcity of autopsy case reports in the 19th century 3 of them are abridged in order to demonstrate that none was recognized as a primary lung cancer despite the striking presence of tumor in the lung. This is explicable on the basis of the striking phenomenon of selectivity of one or both adrenal glands during colonization. Therefore, it is concluded that recognizing such peculiar cases of adrenal selectivity among present-day patients will facilitate the treatment of this fell disease. In fact, recent positive papers on both surgery and radiotherapy are illustrative of this hopeful outlook.

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I. INTRODUCTION

Elsewhere [1], the difficulties experienced generally during the diagnosis of lung cancer in the 19th century were presented. Therefore, the present report concerns a distinct group of as many as 3 cases [2-4] which were identifiable despite the peculiarity of the adrenal colonization. Moreover, it is shown that their recognition can stimulate interest in modern practice including treatment.

II. HISTORICAL MISDIAGNOSIS CASES

The titles are quoted fully. However, the lung involvement is *italicized for emphasis* in the abridged reports which are as follows:

a) "*Primary cancer of the suprarenal capsule*" [2].

Right lung solid throughout. The right bronchial glands were enlarged and mottled white and grey. A large tumor was found behind the liver, five inches in depth, which proved to be the suprarenal capsule. The kidney was healthy as was the left suprarenal capsule.

b) "*New growths in the mediastinum*" [3].

At the root of the left lung the new growth had invaded the main bronchus for half an inch, and actually formed its wall. At this point it also penetrated the lung substance. The bronchial glands were infiltrated. Below the diaphragm the new growth was only to be found in the suprarenal bodies, both of which were infiltrated and enlarged.

c) "*Medullary sarcoma of both suprarenal bodies; horseshoe kidney*" [4].

Both suprarenal bodies are much enlarged, especially in thickness, presenting a rounded outline. On section they were seen to be infiltrated throughout by a soft medullary growth, by which all their proper structural features had been obliterated. The growth was associated with a mediastinal tumour of the same character, which had invaded the left lung from its root.

Clearly, the above three cases were each misdiagnosed because the old masters did not recognize their status as secondary manifestations. Accordingly, in modern times, the emphasis should rightly be laid on the hopeful treatment of lung cancers spreading peculiarly to the adrenals.

III. DISCUSSION

In my review of organ selectivity classes in cancer metastases, 12 classes were discernible [5]. Moreover, the adrenal gland featured in as many as 11 of the classes. This strengthens Bourne's suggestion [6], viz, that the anatomical position of the adrenal glands is probably not fortuitous but related to some evolutionary factor. Hence, I am persuaded that the existence of this inherent factor is supported by my researches on the significant role played by lymphangiogenesis in adrenal selectivity [7,8].

In this context, Internet search was undertaken as regards taking advantage of this unique topography. Firstly, there is the recent report thus: "surgical resection of isolated adrenal metastases from lung cancer appears to have a modest survival advantage over non operative therapy, and it occasionally results in long-term survival" [9]. Secondly, another group agreed that "surgical treatment might improve long-term survival" [10]. Next, in the field of radiotherapy, there are recent papers which convincingly demonstrated its palliative use in cases of symptomatic adrenal metastases [11,12].

IV. CONCLUSION

To promote such successes, there is need to include the upper abdomen so as to improve the detection of adrenal metastases during preoperative screening for metastases in lung cancer [13,14]. In sum, to facilitate current endeavors in the field of lung cancer treatment, extra attention should be paid to these two

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deceptively small upper abdominal organs. In other words, a cohort showing long-term survival can be identified. In sum, since adrenal glands could for long be the only extrathoracic sites of metastasis, this epidemiologically classifiable group of lung cancer patients should be carefully identified and followed up after treatment. In all probability, as Lam and Lo [15] concluded concerning lung cancer, "Long-term survival may be achieved in selected patients in whom an aggressive surgical approach may be adopted."

Conflict of interest

The author wishes to express that he has no conflict of interest.

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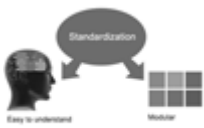
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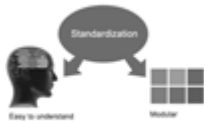
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- To the point depiction of the research
- Consequences, including definite statistics - if the consequences are quantitative in nature, account quantitative data; results of any numerical analysis should be reported
- Significant conclusions or questions that track from the research(es)

Approach:

- Single section, and succinct
- As an outline of job done, it is always written in past tense
- A conceptual should situate on its own, and not submit to any other part of the paper such as a form or table
- Center on shortening results - bound background information to a verdict or two, if completely necessary
- What you account in an abstract must be regular with what you reported in the manuscript
- Exact spelling, clearness of sentences and phrases, and appropriate reporting of quantities (proper units, important statistics) are just as significant in an abstract as they are anywhere else

Introduction:

The **Introduction** should "introduce" the manuscript. The reviewer should be presented with sufficient background information to be capable to comprehend and calculate the purpose of your study without having to submit to other works. The basis for the study should be offered. Give most important references but shun difficult to make a comprehensive appraisal of the topic. In the introduction, describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will have no attention in your result. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here. Following approach can create a valuable beginning:

- Explain the value (significance) of the study
- Shield the model - why did you employ this particular system or method? What is its compensation? You strength remark on its appropriateness from a abstract point of vision as well as point out sensible reasons for using it.
- Present a justification. Status your particular theory (es) or aim(s), and describe the logic that led you to choose them.
- Very for a short time explain the tentative propose and how it skilled the declared objectives.

Approach:

- Use past tense except for when referring to recognized facts. After all, the manuscript will be submitted after the entire job is done.
- Sort out your thoughts; manufacture one key point with every section. If you make the four points listed above, you will need a least of four paragraphs.



- Present surroundings information only as desirable in order hold up a situation. The reviewer does not desire to read the whole thing you know about a topic.
- Shape the theory/purpose specifically - do not take a broad view.
- As always, give awareness to spelling, simplicity and correctness of sentences and phrases.

Procedures (Methods and Materials):

This part is supposed to be the easiest to carve if you have good skills. A sound written Procedures segment allows a capable scientist to replacement your results. Present precise information about your supplies. The suppliers and clarity of reagents can be helpful bits of information. Present methods in sequential order but linked methodologies can be grouped as a segment. Be concise when relating the protocols. Attempt for the least amount of information that would permit another capable scientist to spare your outcome but be cautious that vital information is integrated. The use of subheadings is suggested and ought to be synchronized with the results section. When a technique is used that has been well described in another object, mention the specific item describing a way but draw the basic principle while stating the situation. The purpose is to text all particular resources and broad procedures, so that another person may use some or all of the methods in one more study or referee the scientific value of your work. It is not to be a step by step report of the whole thing you did, nor is a methods section a set of orders.

Materials:

- Explain materials individually only if the study is so complex that it saves liberty this way.
- Embrace particular materials, and any tools or provisions that are not frequently found in laboratories.
- Do not take in frequently found.
- If use of a definite type of tools.
- Materials may be reported in a part section or else they may be recognized along with your measures.

Methods:

- Report the method (not particulars of each process that engaged the same methodology)
- Describe the method entirely
- To be succinct, present methods under headings dedicated to specific dealings or groups of measures
- Simplify - details how procedures were completed not how they were exclusively performed on a particular day.
- If well known procedures were used, account the procedure by name, possibly with reference, and that's all.

Approach:

- It is embarrassed or not possible to use vigorous voice when documenting methods with no using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result when script up the methods most authors use third person passive voice.
- Use standard style in this and in every other part of the paper - avoid familiar lists, and use full sentences.

What to keep away from

- Resources and methods are not a set of information.
- Skip all descriptive information and surroundings - save it for the argument.
- Leave out information that is immaterial to a third party.

Results:

The principle of a results segment is to present and demonstrate your conclusion. Create this part a entirely objective details of the outcome, and save all understanding for the discussion.

The page length of this segment is set by the sum and types of data to be reported. Carry on to be to the point, by means of statistics and tables, if suitable, to present consequences most efficiently. You must obviously differentiate material that would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matter should not be submitted at all except requested by the instructor.



Content

- Sum up your conclusion in text and demonstrate them, if suitable, with figures and tables.
- In manuscript, explain each of your consequences, point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation an exacting study.
- Explain results of control experiments and comprise remarks that are not accessible in a prescribed figure or table, if appropriate.
- Examine your data, then prepare the analyzed (transformed) data in the form of a figure (graph), table, or in manuscript form.

What to stay away from

- Do not discuss or infer your outcome, report surroundings information, or try to explain anything.
- Not at all, take in raw data or intermediate calculations in a research manuscript.
- Do not present the similar data more than once.
- Manuscript should complement any figures or tables, not duplicate the identical information.
- Never confuse figures with tables - there is a difference.

Approach

- As forever, use past tense when you submit to your results, and put the whole thing in a reasonable order.
- Put figures and tables, appropriately numbered, in order at the end of the report
- If you desire, you may place your figures and tables properly within the text of your results part.

Figures and tables

- If you put figures and tables at the end of the details, make certain that they are visibly distinguished from any attach appendix materials, such as raw facts
- Despite of position, each figure must be numbered one after the other and complete with subtitle
- In spite of position, each table must be titled, numbered one after the other and complete with heading
- All figure and table must be adequately complete that it could situate on its own, divide from text

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- Make a decision if each premise is supported, discarded, or if you cannot make a conclusion with assurance. Do not just dismiss a study or part of a study as "uncertain."
- Research papers are not acknowledged if the work is imperfect. Draw what conclusions you can based upon the results that you have, and take care of the study as a finished work
- You may propose future guidelines, such as how the experiment might be personalized to accomplish a new idea.
- Give details all of your remarks as much as possible, focus on mechanisms.
- Make a decision if the tentative design sufficiently addressed the theory, and whether or not it was correctly restricted.
- Try to present substitute explanations if sensible alternatives be present.
- One research will not counter an overall question, so maintain the large picture in mind, where do you go next? The best studies unlock new avenues of study. What questions remain?
- Recommendations for detailed papers will offer supplementary suggestions.

Approach:

- When you refer to information, differentiate data generated by your own studies from available information
- Submit to work done by specific persons (including you) in past tense.
- Submit to generally acknowledged facts and main beliefs in present tense.



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<i>References</i>	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring



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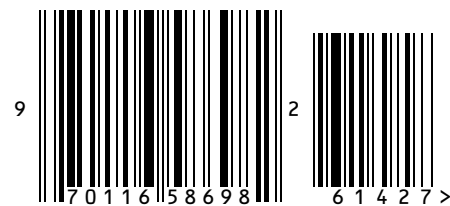
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