Department of Biochemistry, Govt. Medical College Jammu

To
The Principal & Dean,
Govt.Medical College,
Jammu.
No: - GMC/Bio/21/383 .

Dated: - 16.12.2021.

Subject:-Updation of College Website.

Respected Madam,

In reference to the letter No.GMC/Misc/2297 dated 14.12.2021 regarding the subject cited above, in this connection, I am furnishing herewith detail as per the devised format:-

Department	Name of Faculty Qualification IMR Number	Current Designation & Date of Promotion	Nature of Employment	Details of Service in the Last 5 years					No.of lectures taken/year. (Topics covers)
				1(2016-17)	2(2017-18)	3(2018-19)	4(2019-20)	5(2020-21)	
Department of Biochemistry	Dr. A.S. Bhatia(MBBS,MD Biochemistry) (IMR-4035)	Professor (March 2018)	Permanent	Associate Prof.	Associate Prof. till 24 March 2018,Professor 25 March 2018	Professor	Professor	Professor	22
Department of Biochemistry	Dr. Rachna Sabharwal(MBBS,MD Biochemistry)(IMR-697)	Associate Professor (9.10.2019)	Permanent	Lecturer (11.3.2011-10.08.2017)	Assistant Prof (11.8.2017-8.10.2019)	Assistant Prof (11.8.2017-8.10.2019)	Assistant Prof till 8.10.2019, Associate Prof. 9.10.2019	Associate Prof	20
Department of Biochemistry	Dr. Kapila Raina (MSc-Biochemistry, PhD Biochemistry)	Assistant Professor (10.4.2018)	Permanent	Lecturer	Lecturer till 9 April 2018, Assistant Prof. 10.4.2018	Assistant Prof.	Assistant Prof.	Assistant Prof.	16
Department of Biochemistry	Dr. Ashima Badyal(MBBS,MD Biochemistry)(IMR-1871)	Assistant Professor (26.4.2021)	Permanent	Contractual Lecturer	Contractual Lecturer	Permanent Lecturer	Permanent Lecturer	Permanent Lecturer till 25 April 2021 Assistant Professor 26.4.2021	16

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Department of Biochemistry, Govt. Medical College Jammu

Department of Biochemistry	Dr. Anil Kumar(MSc-Biochemistry, PhD Biochemistry)	Lecturer(15.6.2010)	Permanent	Lecturer	Lecturer	Lecturer	Lecturer	Lecturer	16
Department of Biochemistry	Mr. Lakhbir Singh(MSc-Biochemistry)	Lecturer(11.3.2011)	Permanent	Lecturer	Lecturer	Lecturer	Lecturer	Lecturer	16
Department of Biochemistry	Dr.Tehseen Hassan(MSc-Biochemistry, PhD Biochemistry)	Lecturer(23.4.2014)	Permanent	Lecturer	Lecturer	Lecturer	Lecturer	Lecturer	06
Department of Biochemistry	Dr.Pallavi Mahajan (MBBS,MD Biochemistry)(IMR-2798)	Lecturer(19.5.2021)	Permanent	Demonstrator 10.11.2015	Demonstrator till 9.11.2018	Contractual Lecturer 23.7.2019	Contractual Lecturer	Contractual Lect.till 18.5.2021 Permanent Lecturer 19.5.2021	13
Department of Biochemistry	Dr.Gazala Abbas(MBBS,MD Biochemistry)(IMR-4582)	Lecturer(Nov.2020)	Contractual		Demonstrator Jan 2018	Demonstrator	Demonstrator till Nov.2020 Contractual Lecturer Nov.2020	Contractual Lecturer	08

A.S. Bhatia

Prof.(Dr.)A.S Bhatia,MD
Head
Deptt. of Biochemistry,
Govt. Medical College,
Jammu.

DEPARTMENT OF BIOCHEMISTRY,GOVT.MEDICAL COLLEGE,JAMMU

S. No.	Name Of Faculty	Department	Designation	Medical Educator Training	Basic Course in Biomedical Research
1.	Dr Rachna Sabharwal	Biochemistry	Associate Professor	➢ Revised Basic course Workshop, 25th-27th April 2018, attended at CMC Ludhiana. ➢ AETCOM attended at CMC Ludhiana on 28th April, 2018 ➢ Curriculum Implementation Support Programme attended at CMC Ludhiana,on 18th-20th February, 2019 ➢ ACME- Successfully completed in 2018, B Batch at CMC Ludhiana	Basic Course in Biomedical Research done in **August-December 2020- successfully passed**
2.	Dr.Kapila Raina	Biochemistry	Assistant Professor	➢ Done Revised Basic course Workshop at GMC Jammu conducted by MCI Nodal Centre of Medical Education Technologies CMC, Ludhiana from 17th - 19th July 2019. ➢ Done Curriculum Implementation Support Programme at GMC Jammu conducted by MCI Nodal Centre of Medical Education Technologies CMC, Ludhiana from 22 -24 July 2019	
3.	Dr.Ashima Badyal	Biochemistry	Assistant Professor	➢ Revised Basic course Workshop, 8-10 Nov 2021, attended at GMC Jammu ➢ Research Methodology done result declared 15 Jan 2021	
4.	Dr.Anil Kumar	Biochemistry	Lecturer	➢ Done Revised Basic course Workshop at GMC Jammu conducted by MCI Nodal Centre of Medical Education Technologies CMC, Ludhiana from 17th - 19th July 2019. ➢ Done Curriculum Implementation Support Programme at GMC Jammu	Successfully passed Basic Course in Biomedical Research done in March –June 2021

DEPARTMENT OF BIOCHEMISTRY,GOVT.MEDICAL COLLEGE,JAMMU

				conducted by MCI Nodal Centre of Medical Education Technologies CMC, Ludhiana from 22 -24 July 2019.	
5.	Mr.Lakbir Singh	Biochemistry	Lecturer		Basic Course in Biomedical Research done in **March –June 2020 successfully passed**
6.	Dr Pallavi Mahajan	Biochemistry	Lecturer	➢ Revised Basic course Workshop , attended at ASCOMS, Jammu conducted by CMC Ludhiana 3rd to 5th June, 2019 ➢ Curriculum Implementation Support Programme attended at ASCOMS, Jammu conducted by CMC Ludhiana, 6th -8th June, 2019	Basic Course in Biomedical Research done in **March-June 2020 -successfully passed**

Publications of Prof.(Dr) A.S.Bhatia, Head Department of Biochemistry Government Medical College Jammu.

Ashima Badyal, **Amarjeet Singh Bhatia**
Reference Range of glycated haemoglobin in the diagnosis of diabetes mellitus. **International Journal of Research in Medical Sciences**, 2015 Oct3(10) 2669-2671

Ashima Badyal, **Amarjeet Singh Bhatia**
Reference Range Serum TSH and its comparison with values from other laboratories. **Indo American Journal of Pharmaceutical research 2015**, Vol5, issue 08,2595-2596

Kapila Raina, HN Verma, **A.S.Bhatia.**
Prevalence of Vitamin Deficiency in Jammu region, JK Science Journal, Vol 16 No1, Jan- March 2014

Rachna Sabharwal, **Amarjeet Singh Bhatia**, Lakhbir Singh
Screening of Prostate cancer by Prostate specific Antigen and its Prevalance in Jammu Region – **National Journal of Laboratory Medicine** 2016 Jan, Vol 5(1): 8-11

Pallavi Mahajan, **Amarjeet S Bhatia**
Diminished Levels of Vitamin D and Altered Lipid Profile. JMSCR Vol 05 issue 06 (23694 – 23697) June,2017

Pallavi Mahajan, **Amar Jeet S Bhatia**
Deficiency of Vitamin D and its relationship with Hypothyroidism.,Indo American Journal of Pharmaceutical Research, Vol 6,(5123-5126) issue 04 ,2016

Mohit Thalquotra, **Amarjeet Singh Bhatia**, Rajesh Pandey
Kidney and Thyroid glands : Interrelation in health and Disease.
Lambert Academic Publishing

Ashima Badyal, **Amarjeet Singh Bhatia**
Reference Range of glycated haemoglobin in the diagnosis of diabetes mellitus. **International Journal of Research in Medical Sciences**, 2015 Oct3(10) 2669-2671

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Kapila Raina, HN Verma, **A.S.Bhatia.**
Prevalence of Vitamin Deficiency in Jammu region, JK Science Journal, Vol 16 No1,

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Rachna Sabharwal, **Amarjeet Singh Bhatia**, Lakhbir Singh
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Deficiency of Vitamin D and its relationship with Hypothyroidism.,Indo American Journal of Pharmaceutical Research, Vol 6,(5123-5126) issue 04 ,2016

Mohit Thalquotra, **Amarjeet Singh Bhatia**, Rajesh Pandey
Kidney and Thyroid glands : Interrelation in health and Disease.
Lambert Academic Publishing

Sr. No	Faculty Name	Publication in Vancouver referencing style.	Pubmed Indexed **Yes/No**	Scopus
1.	Dr Rachna Sabharwal	1. R Sharma, V. Anandharaman, D. Gajalakshmi, R. S Mahajan, K. N. Sahare, M.V.R. Reddy, K. Goswami. Oxidative Rationale as a novel tool for antifilarial drug designing. FRNPH 2008.		
		2. R. S. Mahajan, V. Anandharaman, D. Gajalakshami, R Sharma, K. goswami, M.V.R. Reddy. Effect of Certain Antibiotics Against Filarial Parasite *Brugiamalayi* In Vitro: Possible Role of Oxidative Stress Indian J Clin Biochem. 2010 Oct; 25(4): 362–366	Yes	
		3. Sabharwal R, Goswami K, hande S, Bhoj P. Evolution of anti-filarial therapeutics: An overview. Journal of Microbiology and Antimicrobial Agents 2015; 1(1): 16-22		
		4. Sabharwal R, Sabharwal S, kataria SP. Hypertriglyceridemia in Acute Pancreatitis. J. App. Med. Sci., 2015; 3(9C):3345-3348		

		5. Sabharwal R , Kataria SP. Glycated HbA1c: A Potential Biomarker for Diagnosis of Type 2 Diabetes Mellitus and its Correlation with Dyslipidemia.. RJPBCS 6(5) 2015: 1501-6.		
		6. Sabharwal R, Bhatia A.S, Singh L. Screening of Prostate Cancer by Prostate Specific Antigen and its Prevalence in Jammu Region. National Journal of Laboratory Medicine. 2016 Jan, Vol 5(1): 8-11	yes	
		7. Sabharwal R, Mahajan P, Bhatia A.S . Association of Subclinical Hypothyroidism with Dyslipidemia JK Science Vol.19 No.2 April-June 2017		Scopus
		8. Sabharwal R, Mahajan P. Age, Sex and seasonal variation of vitamin D level in children of Jammu region, Journal of Clinical and diagnostic research 2018 Aug; vol 12(8) BC 09-BC 11		Scopus
		9. Sabharwal R, Singh L, Bhatia A.S.Dyslipidemia in Diabetic patients with Acute Myocardial Infarction. JK Science,volume 21 No 4,October-December 2019		Scopus

.Dr. Kapila Raina

Current designation: Assistant Professor

Nature of employment: Permanent

Details of service in Last five years:

Number of lectures /Year, Topics covered

Publications of faculty

1. Raina K, Verma N, Bhatia AS, Khanum S. Prevalance of conventional risk factor in acute myocardial infarction among Jammu Division population. Ijcbr. 2020; **7(1) :** 91-97
2. Raina K, Sharma B, Verma N. Alarming Rise of Haemoglobinopathies in Jammu Division. Ijcbr. 2017;**4(4):**391-394
3. RainaK, Verma HN, Bhatia AS. Prevalence of vitamin D deficiency in Jammu region. jkscience.org. 2014; **16(1)**:21-23.
4. Tandon VR, Sharma S, Mahajan S, Raina K et al. Prevalence of Vitamin D deficiency among Indian menopausal women and its correlation with diabetes: A first Indian cross sectional data. J.Midlife Health. 2014;**5 (3):**121-5 **(PUBMED)**
5. TandonVR, Khajuria V, Raina K, Mahajan V. Role of Biomedical Investigations and Diagnostic tools in Detection of adverse drug reactions.JCDR. 2014;**8(9)**: 23-6 **(PUBMED)**
6. Gupta K, Raina K, Kalkkar T, Veer Y. Pregnancy outcome in women with Polycystic Ovarian Syndrome. Jkscience.org.2009;**11(2):**82-84.

Government of Jammu and Kashmir
Health & Medical Education Department
Civil Secretariat, Jammu.

Subject: Subject:-Placement of Ms Kapila Raina as Assistant Professor Bio-chemistry , Govt. Medical College, Jammu.

Ref - i) Case LPA No 82/2016 titled Kapila Raina Vs Dr Rachna Sabharwal and others LPA NO 85/2016 Dr Rachna Sabharwal and others LPA No.32/2017 titled Kapila Raina Vs Dr Rachna Sabharwal and others ,LPA No 33/2017 Kapila Raina Vs Rachna Sabherwal and others , LPA No. 34/2017 Kapila Raina Vs Rachna Sabharwal and others and LPA No. 35/2017

ii) Letter No GMC/Es-1/PF/1601 dated 24.02.2018 received from
Principal GMC Jammu

Government Order No. 259 **-HME of 2018**
Dated : 10 -04-2018

Whereas Dr. Tehseen Hassan Lecturer Bio-Chemistry has been promoted as I/C Assistant Professor in Bio-chemistry in his own pay and grade with Charge allowance as admissible under rule for a period of six months or till the post is filled up on regular basis Government Order No. 673-HME of 2017 dated 18.12.2017to;and

Whereas, as per the seniority list issued vice Government Order No. 194-HME of 2018 dated 20.03.2018 Ms. Kapila Raina. figurers at serial No. 01 of the said seniority list and Dr. Tehseen Hassan figure at serial No. 5 ;and

Whereas as per the SRO 517 of 1979 ,the Jammu & Kashmir Medical Education (Gazetted) Service Recruitment Rules, 1979, the requisite qualification for Assistant Professor Bio-chemistry for non-medical persons have been prescribed as Ph.D in Bio-Chemistry with three years as Lecturer in Bio-Chemistry in any Medical College or from any recognised medical institution; and

Whereas Dr. Tehseen Hassan was considered on the basis of his Ph.D Degree which she had acquired prior to her appointment and whereas Dr. Kapila Raina was left out as she had not the requisite qualification ;and

Whereas Miss Kapila Raina has been awarded the Ph D Degree by Jaipur National University Rajasthan vide No. JNU-jpr/Ph.D/LS/2017/55 dated 19 12 2017.

Whereas, there was some controversy, later Ph. D Degree is concerned and Kapila Raina had filed a SWP No 244/2018 wherein the process of conferment of the PH D Degree was permitted by the court but the declaration of the final result had been stayed and

Whereas Hon'ble Division Bench of High Court clubbed LPA No 82/2016 titled Kapila Raina Vs Dr Rachna Sabharwal and others LPA NO. 85/2016 Dr. Rachna Sabharwal and others, LPA No 32/2017 titled Kapila Raina Vs Dr. Rachna Sabharwal and others ,LPA No 33/2017 Kapila Raina Vs Rachna Sabherwal and others , LPA No 34/2017 Kapila Raina Vs Rachna Sabharwal and others and LPA No 35/2017 Kapila Raina Vs Rachna Sabharwal and others and disposed of by the following common judgement on 26.04.2017:

> "6. In fact , the learned counsel appearing on behalf for the Health & Medical Education Department informs us that the case of DR. Rachna Sabharwal has already been recommended by the Principal GMC along with requisite papers as required under the rules for placement as being eligible for promotion to the post of Assistant Professor Bio-Chemistry , that process may be completed.
>
> 7.We are told that there is yet another post of Assistant Professor Bio-Chemistry which is vacant. Ms. Kapila Raina be considered for that post immediately upon her attaining the Ph D Degree. Since the results were withheld because of the court order, we direct the Jaipur National University to declare the result of Ms. Kapila Raina within two weeks. In case she is conferred the Ph D Degree , then she would become immediately eligible for promotion to the post of Assistant Professor Bio-Chemistry and consequent upon the conferment of the degree of Ph. D Degree, consequent upon the declaration of the result , here PH.D Degree shall operate from today. It is made clear that in case Ms. Kapila Raina is considered and given the promotion to the post of Assistant Professor in the Bio-Chemistry Department , she will be junior to Dr. Rachna Sabharwal."

Whereas, Principal GMC Jammu vide her communication dated 4.2.2018 has intimated that provisional Degree Certificate of Ph D has been issued by the University of Jaipur and now she may be considered for promotion as I/C Assistant Professor in Department of Bio-Chemistry:

Whereas the case has been examined in view of the Court judgement and in light of the existing rules and it has been decided to revert back Dr Tehseen Hassan I/C Assistant Professor and promotion of Dr Kapila Raina shall be considered

Now therefore, in view of the Hon'ble Court direction it is hereby order that -

1. Government Order No 673-HME of 2017 dated 18.12.2017 to the extent of promotion of Dr Tehseen Hassan as I/C Assistant Professor is hereby withdrawn *ab-initio*;
2. Dr. Kapila Raina Lecturer Bio-Chemistry is promoted as I/C Assistant Professor Bio-chemistry in her own pay and grade with charge allowance as admissible under rules with immediate effect/.

By order of the Government of Jammu & Kashmir.

(Nissar Ahmad Wani)
Under Secretary to Government

No. ME/Gaz/309/2011 Dated : 10-04-2018

Copy to the :-

1. Principal, Govt. Medical College, Jammu.
2. OSD to Hon'ble Minister for Health & Medical Education Department
3. Spl. Assistant , Hon'ble MOS Health & Medical Education.
4. Private Secretary to Principal Secretary to Govt. Health & Med. Edu. Deptt.
5. Concerned Doctor
6. I/c web site.

Original Research Article DOI 10.18231/2394-0377.2017.0059

Alarming Rise of Haemoglobinopathies In Jammu Division

Kapila Raina[1]*, Rajeshwari Sharma[2], Neelima Verma[3]

[1]Lecturer, Govt. Medical College, Jammu, [2]Pathologist, Swastik Diagnostic Laboratory, Jammu, [3]Senior Consultant, Fortis Hospital, New Delhi

*Corresponding Author:
Email: kapilaraina19@gmail.com

Abstract

Introduction: Haemoglobinopathies are major public health problems in India. Haemoglobinopathies are inherited single gene disorders having abnormal globin protein. Genes in α-globin and β-globin genes clusters (on chromosomes 16 and 11) control globin chain production. Due to spontaneous mutation in globin genes haemoglobin variants are produced.

Disorders range from thalassemia to many hemoglobin variants with no, mild or severe consequences for the carrier.

Materials and Method: The present laboratory-based retrospective study was conducted for a period of two years from January 1, 2013 to December 31, 2014 in the Government Medical College, Jammu. Data of 543 patients who had come to the laboratory for their hemoglobin electrophoresis was compiled and studied. Complete blood count was carried out on HMX (Beckman Coulter) and hemoglobin electrophoresis for diagnosing any abnormal hemoglobin disorder was done on D10 (BIO RAD).

Results: Out of 543 patients, 368 (67.77%) were normal and 175 (32.23%) had abnormal hemoglobin pattern. Spectrum of haemoglobinopathies prevalent in descending order were 13.99% β-thalassemic trait, 6.26% α-thalassemic trait, 4.6% elevated fetal haemoglobin, 2.57% false elevation of hemoglobin A2 because of mean corpuscular volume, 1.29% β-thalassemic major, 0.93% haemoglobin S homozygous, 0.74% borderline hemoglobin A2, 0.55% patients were with other type of hemoglobinopathies.

Conclusion: High prevalence of haemoglobinopathies in Jammu division makes the disease a major public health problem in our population. Population screening, genetic counseling and prenatal diagnosis can prevent these genetic disorders.

Keywords: Haemoglobinopathies, Thalassemia, Anaemia, beta thalassemia, Jammu.

Received: 19th May, 2017 **Accepted:** 19th July, 2017

Introduction

Among all the inherited disorders of blood, haemoglobinopathies are the major public health problem in the world. Inherited haemoglobin disorders were originally characteristic of tropics and sub-tropics but are now common worldwide due to migration. World Health Organisation estimates that globally at least 5% of adults are carriers for a haemoglobinopathies: approximately 2.9% for thalassemia.[1] There is a tremendous amount of burden of haemoglobinopathies in India. It has been estimated that there would be about 45 million carriers and about 15,000 infants born each year with haemoglobinopathies in India. Major haemoglobin variant, i.e. HbA ranges from 15 to 45% of the total haemoglobin in the red cells. More than 100 alpha-chain variants have been described in the world.[2] The cumulative gene frequency of haemoglobinopathies in India is 4.2%.[3] The cumulative gene frequency of the three most predominant abnormal haemoglobins, i.e. sickle cell, haemoglobin D and haemoglobin E has been found to be 5.35% in India. Every year 10,000 children with thalassemia major are born in India, which constitute 10% of the total numbers in the world.[4]

Haemoglobinopathies are characterized by production of structurally defective haemoglobin because of abnormal globin moiety formation. Hemoglobinopathy is the condition in which there is mutation in haemoglobin which leads to alteration of its biological behaviour. It leads to moderate to severe haemolytic anaemia among vulnerable segments of society like infants, children and adults. It leads to high degree of morbidity.

There are two forms of beta thalassemia.

- Thalassemia minor
- Thalassemia major (also called Cooley's anemia).

The most familiar type of thalassemia is beta thalassemia:

Thalassemia syndromes particularly beta thalassemia major and certain alpha thalassemia are serious and a major cause of morbidity.[3] In India, 10,000 thalassemic children are born every year. In Gujarat, about 6000 thalassemic children are born every year.[5]

Individuals with thalassemia major usually present within the first two years of life with severe anemia, requiring regular red blood cell (RBC) transfusions. Findings in untreated or poorly transfused individuals with thalassemia major, as seen in some developing countries, are growth retardation, pallor, jaundice, poor musculature, hepatosplenomegaly, leg ulcers, development of masses from extramedullary hematopoiesis, and skeletal changes that result from expansion of the bone marrow. Regular transfusion therapy leads to iron overload-related complications including endocrine complication (growth retardation,

ORIGINAL ARTICLE

Prevalence of Vitamin D Deficiency in Jammu Region

Kapila Raina, H.N Verma*, A. S Bhatia

Abstract

Vitamin D deficiency is a worldwide health problem. This cross sectional one year study was carried among healthy subjects of both sexes without known, thyroid, renal or hepatic disease or malignancy. The 25(OH)D concentrations were measured by competitive radioimmunoassay. The subjects were classified as vitamin D-deficient, or -sufficient on the basis of 25(OH)D concentrations of <30 ng/mL, 30-100 ng/mL respectively, according to recent consensus. Total 702 subjects participated in the study female predominated the study. Vitamin D deficiency was prevalent among 76.39% of the total population. Thus the current study sugest high prevalence of vitamin D deficiency exist in Jammu region among healthy population.

Key Words

Vitamin D deficiency, Diabetes, Chronic diseases , 25(OH)D

Introduction

Vitamin D is an endogenous, naturally occurring, photochemically-produced steroidal molecule with essential functions in systemic homeostasis and physiology, including modulation of calcium metabolism, cell proliferation, cardiovascular dynamics, immune/inflammatory balance, neurologic function, and genetic expression. Vitamin D deficiency is a worldwide health problem that affects not only musculoskeletal health but can affect many chronic diseases such as osteoporosis, cardiovascular disease, hypertension, cancer, depression, epilepsy, type 1 diabetes, insulin resistance, autoimmune disease, migraine, polycystic ovary syndrome, and musculoskeletal pain (1).

There is widespread prevalence of varying degrees (50- 90%) of Vit D deficiency with low dietary calcium intake in Indian population according to various studies published earlier (2). Most of the researchers report a uniformly high prevalence of vitamin D deficiency, in various groups of the population like school children, adolescent, rural girls, pregnant women and postmenopausal women (3-6).

Epidemiologic studies have shown association of vitamin D deficiency and increased risk of chronic diseases, such as cancer, cardiovascular disease, type 2 diabetes, and autoimmune diseases, such as multiple sclerosis and type 1 diabetes mellitus (7). The studies do

From the Deptt. of Biochemistry, Govt. Medical College, Jammu and *Deptt. of Life Science, Jaipur National University India
Correspondence to: Dr Kapila Raina, Village Pounichak Post office Akalpur, Jammu J&K- India

ORIGINAL ARTICLE

Prevalence of vitamin d deficiency among Indian menopausal women and its correlation with diabetes: A first Indian cross sectional data

Vishal R. Tandon, Sudhaa Sharma[1], Shagun Mahajan[2], Kaplia Raina[3], Amit Mahajan[4], Vijay Khajuria, Zahid Gillani

Departments of Pharmacology and Therapeutics, [1]Obstetrics and Gynaecology, [2]Biochemistry, [3]Internal Medicine, Government Medical College, Jammu, [4]Department of Anesthesiology, Acharya Shri Chander College of Medical Science, Sidra, Jammu, Jammu and Kashmir, India

ABSTRACT

Aim and Objective: To evaluate prevalence of Vitamin D deficiency and establish any correlation between diabetes and vitamin D deficiency among postmenopausal women. **Materials and Methods:** The 25-hydroxy vitamin D [25 (OH) D] concentrations were measured by competitive in-vitro quantitative immunoassay. The subjects were classified as vitamin D-deficient, insufficient or sufficient on the basis of 25 (OH) D concentrations of < 20 ng/mL, 20–30 ng/mL or > 30 ng/ml, respectively. The apparently normal postmenopausal women (PMW) were subjected to fasting blood sugar levels to analyse any correlation between vitamin D deficiency and diabetes. **Results:** Vitamin D deficiency was observed in 53.35% of the population, 19.48% had insufficiency and 26.83% had adequate vitamin D levels. In 12.14% of the study population fasting blood glucose was > 110 mg/dl and rest of the subjects were between the normal range which is 70–110mg/dl. Correlation between raised blood sugar levels and Vitamin D deficiency among PMW was non-significant ($P = 0.324$). **Conclusion:** High prevalence of vitamin D deficiency exists among apparently healthy Indian PMW. However, the current study failed to show any statistical correlation between vitamin D deficiency and existence of diabetes, which may be due to small sample size.

Key Words: Chronic diseases, deficiency, diabetes, postmenopausal women, vitamin D

INTRODUCTION

Vitamin D deficiency is a worldwide epidemic health problem, with a range of prevalence in between 70%–100% in the general population.[1] Whereas, among Indian population with low dietary calcium intake, a prevalence of varying degrees (50–90%) has been reported.[2] Most of the researchers have uniformly reported a high prevalence of vitamin D deficiency, in various groups of the population like healthy school children, adolescents, rural girls, pregnant women and health care professionals.[3-5]

Studies do exist reporting high prevalence of Vitamin D deficiency among postmenopausal women (PMW) from western world and India but data still remain scanty.[6-10]

Address for Correspondence: Dr. Vishal R. Tandon, Department of Pharmacology, Government Medical College, Jammu 180 001, Jammu and Kashmir, India.
E-mail: dr_vishaltandon@yahoo.com

Secondly, Vitamin D deficiency and diabetes mellitus are widely prevalent diseases during menopause. Furthermore few epidemiological studies have shown an association of vitamin D deficiency and increased risk of chronic diseases like cancer, cardiovascular disease, type 1 and 2 diabetes (T1D, T2D) suggesting that that vitamin D deficiency not only affects musculoskeletal health but also affects a wide range of acute and chronic diseases.[11]

To best of our knowledge, no study exists from India evaluating correlation between diabetes and vitamin D deficiency among PMW. Moreover, such a data will be of immense use for the Indian health care providers.

Access this article online

Quick Response Code:

Website: www.jmidlifehealth.org

DOI: 10.4103/0976-7800.141166

First Indian Study Evaluating Role of Biochemical Investigations and Diagnostic Tools in Detection of Adverse Drug Reactions

VISHAL R TANDON, VIJAY KHAJURIA, KAPILA RAINA, VIVEK MAHAJAN, AMAN PUROHIT, SOHAN SINGH

ABSTRACT

Aim of Study: To evaluate the role of biochemical investigations (BI) and diagnostic tools (DT) in ADR detection

Materials and Methods: An observational prospective cross-sectional study was done using suspected ADR data collection form.

Results: A total of 2381 ADR related events were recorded in two years. Total number/percentage of biochemical abnormalities (BA) related ADR detection rate was 14.57% and of DT was 1.091% in contrast to 84.33% recorded with clinical presentation. Maximum cases were inward patients (87.13%), 97.02% were recorded by active surveillance. ADR detection rate at one point & detection on follow up was 56.31% Vs 46.38%. ADR detection rate of ECG, endoscopy, X-ray were 0.57%, 0.22%, 0.22% and of CT scan, MRI, DEXA scan, USG and biopsy was 0.04% each. Maximum ADRs were severe/serious, latent and Type-A in nature. Anaemia (4.6%), followed by liver dysfunction (2.8%), renal dysfunction, electrolyte imbalance, hyperglycemia (1.1% each), abnormal coagulation profile (1%), decrease platelet count (0.8%), hypoglycemia (0.7%) were the most common BAs. Anti retroviral drugs (ART), tirofiban and methotrexate accounted for anemia, ART and anti tubercular drugs for liver & renal dysfunction, insulin for hypoglycemia, tirofiban, paclitaxel, capecitabine and ifosfamide for thrombocytopenia, hematuria by enoxeparin & dyslipidemia with ART were common ADRs.

Conclusion: BI and DT can play very important role in ADR detection.

Keywords: [illegible]

INTRODUCTION

Adverse drug reactions (ADRs) account for considerable mortality, morbidity and in addition have immense economic impact on patients, health care providers and society at large [1]. Most of the ADRs are preventable [2]. Under reporting of ADRs is a big challenge in pharmacovigilance (PV) [3,4]. This is because primarily most of the countries follow spontaneous/voluntary system of ADR reporting including India.

There are patient and doctor related reasons for under-reporting. ADRs go unnoticed due to failure of medical teams to recognize ADR or correlate precisely with biochemical, pathological or radiological abnormalities [5].

However, intensive monitoring approach in PV amplifies the ADR detection [6]. Various approaches have been recommended to intensify the ADR reporting [7-13].

The role of biochemical investigation and various basic diagnostic tools like X-Ray, ECG, endoscopy, CT scan, MRI, DEXA, FNAC and ultra-sonography can be of immense value in picking up of various ADRs if active surveillance is carried out. However, their role in PV remains undermined. Moreover, there are various studies in the literature, where primarily clinical presentations have been used to describe trends of ADRs both from India [14-18] and Western world [19-22].

To best of our knowledge there exists no single study where the role of these valuable BI and DT in PV has been investigated. Hence, the first study of its kind was undertaken to underscore their role in ADR detection.

MATERIALS AND METHODS

An observational, cross-sectional prospective two year study was done in Adverse Drug Reaction Monitoring (ADRM) Centre, working under (PvPI) in a tertiary care teaching hospital from India w.e.f 1st November 2010 to 31st October 2012 using suspected ADR data collection form after IEC permission vide number Pharma/IEC/2014/3607/Research/6C/2012/2741.

The sample collection was based on both active surveillance and spontaneous ADR reporting.

Information about patient, suspected ADR, suspected medication and the reporter were recorded. Date of reaction, date of recovery and presentation of problem were also recorded. Suspected medication, name of drug, brand of manufacturer, generic name of manufacturer (if known), expiry date, dose used, route, frequency and therapy dates as well as reason for prescribing suspected drug were recorded. The information about de-challenge and re-challenge, concomitant medical treatment, the relevant laboratory biochemical investigation and various basic diagnostic tools like X-Ray, echocardiography (ECG), endoscopy, computed tomography (CT) Scan, magnetic resonance imaging (MRI), dual-energy X-ray absorptiometry (DEXA), and fine needle aspiration cytology (FNAC) were recorded separately. Other relevant history including pre-existing medical conditions like allergy, pregnancy, smoking and alcohol intake and any organ dysfunction was recorded. The seriousness of reaction, the outcome of reaction and onset time was recorded for every suspected ADR. The suspected ADRs were classified in term of causality using WHO-UMC scale as certain, probable, possible, unlikely, unclassified & unassessable and [23] using Naranjo scale as highly probable (score 9), probable (score 5-8), possible (score 1-4) and doubtful (score 0) [24].

Detailed subgroup analysis of ADRs detected by biochemical abnormality (BA) and diagnostic tools (DT) was carried.

STATISTICAL ANALYSIS

Analysis was carried out with the help of computer software SPSS Version 15 for windows. The data was expressed in number (n) and percentage (%). Chi-square test was applied for the parameters to prove their statistical significance. p-value < 0.05 was considered statistically significant.

ORIGINAL ARTICLE

Pregnancy Outcome In Women with the Polycystic Ovarian Syndrome

Amita Gupta, Kapila Raina, Tanis Kalkdar, Yudhishter Veer

Abstract

The aim of the study is to compare the pregnancy outcome, especially the prevalence of gestational diabetes mellitus in a group of patients with PCOS, with a group of healthy, weight matched women. Retrospectively we evaluated the pregnancies of 56 women with PCOS some of who had been treated for infertility. These were compared with a group of 56 age and weight matched controls. Incidence of Pregnancy induced hypertension in cases of PCOS was 14.2 % (8/56) , gestational diabetes was 14.2 % (8/56) IHCP 10.7% (6/56) as compared of age and weight matched controls is with the incidence of PIH was 7.10% (4/56), GDM 3.5% (2/56) IHCP 7% (4/56).The differences in the incidence of GDM & PIH in two groups was not significant. The outcome of pregnancy in controls & the test groups were not significant, though numerically found to be heigher.Thereby, suggesting PCOS must be screened for comorbid conditions like PIH, GDM &IHCP.

KeyWords

Gestational Diabetes Mellitus, Polycystic Ovarian Syndrome, Pregnancy Induced Hypertension

Introduction

PCOS is one of the most common endocrine disorders in women of reproductive age. It effects 4-12 % of women in reproductive age group (1). It is the leading cause of anovulatory infertility and hirsutism. PCOS is also associated with disorders of reproduction, metabolism and general health including increased risk of miscarriage, insulin resistance, hyperlipidaemia, cardiovascular disease and endometrial cancer, women with PCOS have high rate of type 2 diabetes mellitus (2).Overall data in our set is scanty comparing outcome of pregnancy in PCOS and age & weight matched controls.Hence, the purpose of this study was to compare outcome of pregnancy in PCOS and age & weight matched controls and to predict the complications during antenatal period for a better perinatal outcome.

Materials and Methods

We studied the outcome of pregnancy in the patients who were diagnosed and were having PCOS. The women met the following criteria for the diagnosis of PCOS.

i) Oligomenorrhoea (menstrual cycle longer than 35 days)
ii) Anovulatory infertility on follicular study
iii) Typical morphology of polycystic ovaries on ultrasound scan.
iv) Increase level of at least one androgen (reference values for normal concentrations). Testoterose 0.5 - 2.63 nmol/l androstenediose 1.57 - 5.4 nmol/l, dehydroepiandrostene 0.8 - 10.5 nmol/l & DHEA-S (2.4-14.5micromol/L) (3).

We studied total of 56 patients who presented during the period Jan 2005 to Dec 2006. Some patients had conceived spontaneously (n=|16| - 29%) and 71% (n=40) some had some kind of treatment in the form of clomiphene, metformin & Gonadotropins. All these women with their controls were followed during pregnancy in Suvidha Mother and Child Nursing Home. All patients were interviewed personally to obtain the relevant information about their medical and family history.The diagnosis of Gestational diabetes mellitus was based on

From the Suvidha Mother & Child Care Nursing Home , Jammu J&K-India
Correspondence to : Dr. Amita Gupta, Consultant Gynaecologist, Suvidha Mother & Child Care Nursing Home , Jammu- J&K-India

DR. ANIL KUMAR

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Lakbir Singh

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PUBLICATION RELATED INFORMATION AS DESIRED BY NMC

Name of the Faculty: Dr. Gazala Abbas

Designation: Lecturer

	Publication as per Vancouver Referencing style	**Type of publication** Original article, review article, case report, case series or short article.	**Indexed in Pubmed/ Medline**	**Indexed in Scopus**
2016	**Gazala A. Tahir**, Tahir Afzal, Nita Garg Association of Vit D3 and Serum Calcium levels in Subclinical Hypothyroidism: IJAR Vol 6/Issue:7/July 2016. 309-310.	Original	No	Yes
2016	Dr. Tahir A., **Gazala T.** Dr. Nita Garg Clinical efficacy of HLA B27 for diagnosis of Ankylosing Spondylitis: IJAR/Vol -6/Issue-9 /Sept 2016, 665-668	Original	No	Yes
2019	**Gazala A. Tahir**, Zubair A. Lone, Tahir M. Afzal, Clinical Accuracy of Anti-CCP and Rheumatoid factor(RF) in the diagnosis of Rheumatoid Arthritis (RA); IJAR Vol-9/issue-7/July-2019/Print ISSN 2249 - 555X	Original	No	Yes
2020	Tahir M. Afzal, **Gazala A. Tahir** - Prevalence and Effects of Musculoskeletal Problems in Orthopaedic Surgeons. IJSR/ Vol - 9/ Issue-9/September 2020	Original	No	Yes