"Prevalent Clinical Entities Of Hilly Regions, Aetio-Pathogenesis Factors, An Introspection".

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"ABSTRACT": Introduction: Certain Surgical Clinical Conditions Manifests To Variable Extents With High Prevalence In Hilly Regions. The Discrete Analysis Of Different Aetio-Pathogenesis Factors & Resultant Patho-Physiological Changes Exhibit Comparative Co-Relation To Clinical Manifestations, ManageMent GuideLines & OverAll Result OutCome ParaMetres.

<u>Aims/Objectives</u>: Amongst Extensive Clinical Affections Of Various Body Systems, Caused/Precipitated By Variety Of Geo-Climatic Factors: Cold Exposures, Vegetations, High Altitude Variations Etc.A Group Of Clinical Conditions:

-Ano-Rectal Pathologies (Haemorrhoids Different Grades, Ano-rectal Mucosal Prolapse, Variable Extents & Types of Ano-Rectal Prolapse), -Different Stages Of Uterine Descent (Utero-AnoRectal-Vesical Prolapse, Cystocele, Rectocele, Prolapse Uterus), -Hernias Of Different Vareities(Divarication Rectii, Rectus Sheath Haematoma, Inter/IntraMuscular - Spigelian, Femoral, Incisional, Recurrences),-Varicose Disease(Inf. Extremities, Varicocele),-Inter-Vertebral Disc Space Lesions (Lumbar/Lumbosacral)Resultant Nerve Root Radiculopathies,

-Crystalluria With Different Sediments, Casts & ?Evident UroLithiasis, Presenting As UTIs, Rec. Urinary Colics, -- Progressive Necrotizing Fascitis :Variable Manifestations, Fascitis Of Varying Site, Extent (+-)Contractures, Deformities, Nodularities Arising From Skin, S/C Tissue, Muscle Sheaths, Various Stages Of Haematoma, (+-)H/o Direct/Indirect Trauma & Others,

Have Been Studied In Regards To Increased Incidence, Causative/Precipitating Factors, Patho-Physiological Changes, Prevention, OverAll Management Modalities & Tt.Result OutComes.

<u>METHODS</u>: In Large No. Of Patients With Discussed Clinical Presentations, Discrete Cl. History, Exam. & Subsequent Disease Course Studies, With Emphasis Upon Listed Suggestive Aetiological Factors:

-Chr.Cough, Chr.Constipation, Prostatism & Or Other Obstructive Uropathies e.g Chr.UTI, Srictures & P.I.D Leucorrhoea, Menstrual Irregulrities, Repeated Pregnancies With Definitive Suggestive H/o Obstructed Labours (In Females). - Occupational H/o Manual Work, Agricultural Workers & Industrial Occupations

-H/o Strenuous Exercise Life Styles, With Suggestive Instance Of Direct Or Indirect Muscular Trauma With / WithOut Swellings, Haematoma Formations Etc. - Exposure To Various Different Infections, Infestations, Herbs, Vegetations,

Thorns ?Allergens Etc. - Nutritional Factors:Anaemia, HypoProtienemia ?Worm Infestations, Bowel Irregularities,

- Chr.Debilitating Diseases:Pancreatitis, Diabetes, Tuberculosis,HIV,HbsAg,Collagen Tissue Disorders,Auto-Immune Disorders Etc. - Gravitational/Orthostatic Factors:Responsible For Important Significant Role Especially In Pelvic, Ano-Rectal,Genital Diseases,Varicose Disease & Hernias, Were NoticeAble By Persisting Presence.

The Aetio-Pathogenesis & Patho-Physiological Changes Changes, Explainable By EvolveMent From Quadrupeds To Erect Posture In Human Beings, Especially In Hilly Terrains, With Differently Variables, Yet Almost Persistent Strain Of Walking Inclinations & Declinations Of Mountains, Up & Down. The Patho-Physiology Associated With Altered Gravitational Forces, UnAvoidAble During Day To DayRoutines, Has Significant Suggestive Colloboration To Increased Prevalence Of Such Diseases (Diagrammatic Illustrations Included In The 'Text')

<u>RESULTS</u>: Obvious Demonstratable Evidence Of Co-Existence Of One Or More Listed Suggestive Aetio Pathogenesis Factors; Different Magnitude & Intensity & Resultant Comparative Patho-Physiological Changes, Disease Courses, Management Modalities & OverAll Tt. Result OutCome, Has Been Observed ThroughOut.

<u>CONCLUSION</u>: The Recognized Awareness Of Various Factors, HelpFul For Proper Dx, Management GuideLines, Can Be Significantly Utilized As "Prevention & Control Strategy Aspects" By,

- Practically Justifiable Modifications Of LifeStyles, Pertaining To Good General Health & Avoiding Diseases. Emphasizing Abstinence Of All Preventables Cautiously.
- Awareness, Availability & Compliance Adherence To Different 'Suggested Supportive Measures'.

<u>KEY-WORDS:</u> Mountains: Prevalent Clinical Entities 1), Aetio-Pathogenesis Factors Analysis 2) Demonstrable Co-Relation Of Disese To Causative Factors 3), Prevention & Control Strategy Aspects 4)

I. 'INTRODUCTION'

-Certain Surgical Conditions,[1]With Varying Extents Of Clinical Manifestations, Have
High Prevalence, In Hilly Regions, BesideEpidemiological Prevalence Of Certain Definite Infections,
Nutritional Deficiency Diseases Etc.-Comparative Co-Relation To Clinical Manifestations, ManageMent
GuideLines & OverAll Result OutCome ParaMetres.

II. 'AIM/OBJECTIVES'

• Amongst Extensive Clinical Affections Of Various Body Systems, Caused/Precipitated By Variety Of Geo-Climatic Factors: Cold Exposures, Vegetations, High Altitude Variations.

THE PREVALENT CLINICAL CONDITIONS INCLUDE:

-ANO-RECTAL PATHOLOGIES: (Haemorrhoids: Different Grades, Ano-rectal Mucosal Prolapse, Variable Extents & Types of Ano-Rectal Prolapse)

-DIFFERENT STAGES OF UTERINE DESCENT:

(Utero-AnoRectal-Vesical Prolapse, Cystocele, Rectocele, Prolapse Uterus)

-HERNIAS OF DIFFERENT VAREITIES:

- (Divarication Rectii, Rectus Sheath Haematoma,Inter/IntraMuscular Spigelian, Femoral, Incisional, Recurrences)
- -VARICOSE DISEASE:(Inf. Extremities, Varicocele Etc.)
- -PERIPHERAL VASCULAR DISs: (Precipation By Cold Exposure: Frost Bite, Chill Blains Etc.)

-INTER-VERTEBRAL DISC SPACE LESIONS:

(Lumbar/ Lumbosacral) Resultant Nerve Root Radiculopathies)

-SUGGESTIVEH/O DIRECT/INDIRECT MUSCULAR?TRAUMA?FALL \rightarrow \neq Ribs, Hydro-Pneumo-Pyo-Thorax, Pyo-Peritoneum etc.

-CRYSTALLURIA With Different Sediments, Casts &

?Evident 'UROLITHIASIS', Presenting As UTIs,

Rec. Urinary Colics, Haematuria Etc.

-PROGRESSIVE NECROTIZING FASCITIS:

Variable Manifestations, Fascitis Of Varying Site, Extent (+-)Contractures, H/o Variable Allergens Exposure.

-DEFORMITIES, NODULARITIES Arising From:

Skin,S/C Tissue, Muscle Sheaths, Various Stages Of Haematoma (+-)H/o Direct/Indirect Trauma Leading To Different Histopathology Swellings, Fascitis Etc. <u>& OTHERS</u>,

Have Been Studied With Regards To Increased Incidence, Causative/Precipitating Factors,

<u>Patho-Physiological Changes</u>, <u>Preventive Measures</u>, <u>OverAll Management Modalities & Tt.Result OutComes</u>. In Large No. Of Patients With Discussed Clinical Presentations, Discrete Cl.History, Exam. & Subsequent Disease Course Studies Performed, <u>With Emphasis Upon Listed Suggestive</u>,

"AETIOLOGICAL FACTORS": -Chr.Cough:Chest Infections Predisposed By ColdExposures, Chr.Constipation, Prostatism & Or Other Obstructive Uropathies e.g Chr.UTI, Srictures & P.I.D, Leucorrhoea, Menstrual Irregularities, Repeated Pregnancies With Definitive Suggestive H/o Obstructed Labours [2.3.4,5] - Occupational H/o Manual Work, Agricultural Workers & Industrial Occupations -H/o Strenuous Exercise Life Styles: With Trauma With /WithOut Swellings, Haematoma Formations Leading To Subsequent Cyto-Patho-Physiological

Changes With Resultant Fibrosis & Skin & Sub-Cutaneous Tissue Tumours.

-Exposure To Various Different:Infections,Infestations[6,7,8,9,10,11,12,13,14,15], Herbs, Vegetations, Thorns ?Allergens Etc [17,18,19]

- →Extremities Cellulitis ?Progressive Necrotizing, Wild Animals/Insects Bites Etc
- -Extremes Cold. High Altitude Climatic Conditions
- -Geo-Political, Socio-Cultural LifeStyles, Taboos, Traditions Variables
- -<u>Nutritional Factors:</u> Anaemia, HypoProtienemiaThyroid DysFunction[16], ?Worm Infestations, Recurrent Bowel Irregularities
- -Chr.Debilitating Diseases: Pancreatitis, Diabetes, Tuberculosis, HIV, HbsAg, Collagen Tissue Disorders, Auto-Immune Disorders Etc. . .

"GRAVITATIONAL/ORTHOSTATIC FACTORS":

Responsible For Important Significant Role Especially In Pelvic, Ano-Rectal, Genital Diseases, Varicose Disease & Hernias, Were NoticeAble Significantly By Their 'PERSISTING PRESENCE'.

The Aetio-Pathogenesis & Patho-Physiological Changes, Related To EvolveMent From Quadrupeds To Erect Posture In Human Beings, Attributable To High Incidence Of Inter-Vertebral Disc Space Lesions, Varicose Disease & Other Diseases Predisposition D/T Altered/Raised IntraAbdominal Pressure: Hernias, Ano-Rectal; Utero-Vesical Prolapse Etc. Especially In Hilly Terrains, With Differently Variables, Yet Almost Persistent Strain Of Walking Inclinations & Declinations Of Mountains, Up & Down.

The Patho-Physiology Associated With Altered Gravitational Forces,

High Altitude Oxygen

& Other Climatic Conditions,

UnAvoidAble During Day To Day Routines,

Has Significant Suggestive Colloboration To Increased Prevalence Of Such Diseases.

III.'RESULTS'

Obvious Demonstratable Evidence Of Co-Existence Of One Or More Listed Suggestive Aetio-Pathogenesis Factors;

In Different Magnitude, Intensity & Resultant Comparative Patho-Physiological Changes, Disease Courses, Management Modalities & OverAll Tt. Result OutCome, Has Been Observed ThroughOut, For Their UseFul Implications In Clinical Practice.

IV.'CONCLUSION'

The 'Text' For Hilly Regions Diseases Around The Globe, Retains One Of The Most Important Status, In The List Of Various Different Aspects Of 'Medical Geographics Studies'

With Global Perspectives, Yet Not Much "Study Materials" To This Regards Are Available,

In Print Media(Books Etc.) & Or Computronics Media.

The Present Study Is An Attempt Towards OverAll Assessment Evaluation Of Different Hilly Region Diseases In Prevalence, With Regards To Aetio-Pathogenesis Factors, Other Differentially Variable Aspects,

The Scientifically Recognized Awareness Of Various Involved Factors In A Concise Summarized Discusion.

The Recognized Awareness Of Various Factors, HelpFul For Proper Dx, Management GuideLines, Can Be Significantly Utilized As.

"PREVENTION & CONTROL STRATEGY ASPECTS" By:

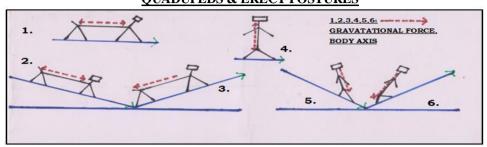
- Practically Justifiable Modifications Of Lifestyles, Pertaining To "Good General Health" & Avoiding Diseases.
- Emphasizing Abstinence Of All 'Preventables' Cautiously.
- Awareness, Availability & Compliance Adherence To Different 'Suggested Supportive Measures'.

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VI. <u>LINE DIAGRAMS</u> <u>DEPICTING GRAVITATIONAL/ORTHOSTATIC FORCES</u> ALONG BODY-AXIS,

DURING WALKING HORIZONTAL GROUND, ASCENDING & DESCENDING HILLY SLOPES; OUADUPEDS & ERECT POSTURES



"HORIZONTAL GROND LEVELS: INCLINATIONS & DECLINATIONS"

"QUADRUPEDS & ERECT POSTURE"

NOTE:
THE ADDITIONAL ANTERIOR & POSTERIOR FORCES (5,6);
DURING WALKING INCLINATIONS. & DECLINATIONS.

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