“Recurrent Lower Abdomen Pain, An Introspection.”

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Abstract:
Introduction: Recurrent Pain Lower Abdomen, (“RLAP”), With/Without Previous Appendectomy & Other Surgeries, Comprise Large No. Of Patients Being Treated Indiscriminately For Years, Without Proper Diagnosis.

Aims/Objective: The Several Variable Aetio-Pathogenesis Factors & Management Modalities, In Different Age, Sex,Occupational,Socio-Economic,Geographical Group Patients, ‘RLAP’ Studied Under Broad Categorization Of,Post- Appendectomy Cases(Or Other Surgery); Group ‘A’ & Without Prior Appendectomy(Surgery); Group ‘B’.


Results: The Discrete Causative Lesion Dx & Appropriate Treatment Plan (Curetive & Or Maximally Palliative), With Secured Sincere Compliance, Formed The Basic Fundamentals For Overall Better Result Outcomes.


Key-Words: 1.Rec. Lower Abdomen Pain With/Without Previous Surgery (RLAP-Group A & B)  
2.Discrete Clinco-Investigatory Methodology  
3.Obscured Definite Causative Lesions  

I. ‘Introduction’
‘Recurrent Lower Abdomen Pain’, With/Without Previous Appendectomy And Or Other Surgeries, Comprises Large No. Of Patients Being Treated Indiscriminately For Years, Without Proper Diagnosis. Enunciated The Need Of The Present Multicentric Study, Conducted During More Than Two Decades Of, Intensive Clinical Practice, At Different Workplaces, In The Available Limited Resources Circumstances.[1,2,3,4]

II. ‘Objective’
The Several Variable Aetio-pathogenesis & Management Aspects Of, ‘Recurrent Lower Abdominal Pain (‘RLAP’), In Different Age, Sex, Socio-Economic, Geographical Back-ground Groups Of Patients, Studied Under Broad Categorization Of:
Post- Appendectomy(& Or Other Surgery) Patients ; ‘RLAP’Group ‘A’ & Cases Without Prior Appendectomy(& Or Other Surgery); ‘RLAP’ Group ‘B’.

Generalized Diffuse Lower / Left / Right Abd. Pain & Or InfraUmbilical SupraPubic Region Pain Clinical Entities, Have Been Categorically Included, As & When, In Accordance Of Occurrence. [5,6,7,8]

III. ‘Material & Methods’

‘CLINICO-INVESTIGATORY DIAGNOSTIC APPROACH’
The Important ‘Diagnostic Tools’:
(I) CLINICAL HISTORY;
(A) Particulars Of The Pt.: Age, Sex, Religion, Marriage, Occupation, Residence, Socio-Economic Status Etc.

(B) Chief Complaints:
1. Pain: Time Of Onset, Mode Of Onset, Duration, Site, Shifting, Radiation, Referred, Character, Effect Of Pressure, Relation To Jolting/Walking/ Respiration/Bowels & Micturition, Better / Worse Factor, Relieving Factor Etc.
2. Vomiting: Frequency, Vomitus Character, Quantity, Relationship With Pain, Etc.
3. Bowels: Relative/Absolute Constipation, Mucus, Blood Discharge, Pain Defaecation, Suggestive H/o: Worm Infestations, GIT Tuberculosis, Gas Ball Movement, Alternate Diarrhoea With Constipation, Anorexia, Weight Loss, Other Constitutional Symptoms, Any Other Ano-Rectal Pathology

(C) Personal History: Menstrual, Obstetrical, Gynaecological History, Especially For White & Or Other Discharges P/V Etc. History Of Intoxicants Etc.

(D) Past History: Suggestive Relevant Previous Episodes, Treatment

? Previous Surgery Details Etc.

Special Emphasis On Suggestive H/o: Gen. Chr. Diseases, Infections, Infestations, e.g. T.B, Worms, Crohn’s Disease, Ulcerative Colitis, IBS etc

(II) CLINICAL EXAMINATION;
Expert Discrete Cl. Approach For Exam; Abdomen, Lower Chest, Back Include

“CLINICAL SIGNS”: Pointing Test, Bed Shaking Test (Bapat), Cough Test, Muscle Guarding Rebound Tenderness (Blum Berg’s Sign/ Release Sign), Rovsing’s Sign, Psoas’s Sign (Cope’s / Zachary Cope Test), Obturator’s Sign, Baldwin’s Test, Sherren’s “A” Of Hyperaesthesia, Amoebic Point (Boas Sign), Recently In Practice Line Tests Etc. & The Various Other Classical Signs For Cl. Evaluations.


Clinical Assessment Pertaining To; Vertebral Column, Parieties, Ext. Genitalia, Perineum & Ano-Rectal Region, Forms An Integral Part & Basis Of, Meticulous Clinical Evaluation Of All Cases Of Pain, Abd., Esp. Lower Abdominal Region, More So In Hesitant, Ignorant, Adolescent Or Female Patients.


Parieties; Abscess, Rectus Sheath Haematoma, Spigelian, Lumbar, Incisional Hernias Etc.

(III) INVESTIGATIONS; [21,22,23][39]

1. Routine Investigations: Blood Group, Hb, TLC, DLC, ESR., BT CT, Urine: R & M, Blood Sugar (R), Blood Urea, S. Creatinine, S. Uric Acid, LFT, HIV For Aids, HbsAg, HCV, X-ray Chest, ECG.

2. Specific Investigations: Widal Test (Enteric Inf.), S. Amylase, LDH, S. Calcium, Methaemalbumin (Pancreatitis), CRP >6 Mg./L. (Appendicitis), Urine Analysis With Special Comment Upon; ? Crystalluria, Sediments Etc. Urine C & S, Porphyrias

Stool Analysis: Infections, Worms, Undigested Food Particles Etc.

& Other Recently Available Specific Investigations: Serology, Immunology, Immuno-Assays, Radio-Isotope Studies, Tumor Markers Etc.

For Different Infections, Inflammations, Infestations, Chr. Illnesses, Auto-Immune Disorders, Malignancies Etc.
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(3.) Radio-Diagnosis:
Radiology: X-ray Abdomen Both Domes Erect; (Gas Under Diaphragm: Visceral Perforation, ROS/SOLs: Urolithiasis Etc), Tomography.
Plain X-ray Abdomen/Spine: Closed Observation Of Inter-vertebral Disc Spaces.
High Resolution USG: Diverticulitis, Appendicitis, Bowel Wall Thickness/Abcess
USG Inguino-Serotum: With/Without Color Doppler’s Study, Valsava’s Manouvres; Testicular & Assoc. Anatomical Structures Lesions.
CT, Contrast Enhanced Computerised Tomography (CECT), MRI Etc.:
Focused CT Scan; Appendicitis, Ureteric Colic (If Contrast Allergy)
CECT Whole Abdomen: Performed With Ease & Efficacy Nowadays, Has Definite Advantage Of Accuracy & Precision Over Barium, IV, Cysto-urethrography, R.G.U Etc.
Contrast Radiology & CT Scan Alone Or In Combination;
Ileo-caecal Region Pathologies, Obstructive Lesions, Angulations, ? Cause, IC Region Lymph Nodes, Meso-appendix, Appendicular Stumps, Appendicoliths, Phlegmons Etc.
Maeckel’s Diverticulum, Other Diverticulums Related Diseases, ? Invaginated, Introverted Diverticulums
Contrast Radiology: I.V.P. : Emergency, Barium Studies Including Ba Enema, Double Contrast Studies, Ileo-caecal Region Studies, Colonography CT, MRI Guided Diverticulography I.V. Cholangiography, ERCP, MRCP.
(4.) Endoscopy: Upper G.I.T; APD, Gastritis, Reflux Oesophagitis, Bleeding Sources
Lower G.I.T; Ano-Rectal Lesions, Colonoscopies (+_) Contrast, ? Double Contrast Etc.
(5.) Radio-Isotope / Scintigraphics Study:
A) Indium-111 Labelled WBC: Esp. USG Negative Visceral Perforation
B) Technetium 99m Labelled WBC: Pediatric Appendicitis
C) Technetium 99m Scan; Maeckel’s Diverticulum Etc.
(6.) Diagnostic Laproscoy
(7.) Exploratory Laprotomy

IV. ‘Methodology’

All Cases Of Pain Abdomen Of Varying Duration & On Set, Need Meticulous Clinical Assessment & Diagnostic Evaluation, To Diagnose The Causative Disease & Decide Subsequent Medical & Or Surgical Management, Eitherwise.

‘PAIN ABDOMEN: DIFFERENTIAL DIAGNOSIS’
(A) Intra-Abdominal Causes;
1. Inflammation- [58,59,60,61] Acute Appendicitis, Acute Cholecystitis, Acute Salpingitis, Acute Diverticulitis, Acute Regional Ileitis, Acute Pneumococcal Peritonitis, Acute Non-specific Mesenteric Lymphadenitis, Amoebic Liver Abscess. [40]
2. Perforation- Peptic Ulcer, Typhoid Ulcer, Diverticular Disease, Ulcerative Colitis etc.
3. Acute Intestinal Obstruction-
   (A) Mechanical-
   (I) In The Lumen- Gallstone, Round Worms, Faecolith, etc.
   (II) In The Wall- Tubercular Stricture, Intussusception, Growths etc.
   (III) Outside The Wall- Additional Bands, Volvulus, External And Internal Herniae etc.
   (B) Toxic- Paralytic Ileus.
   (C) Neurogenic- Hirschprung’s Disease.
   (D) Vascular- Occlusion Of Mesenteric Vessels By Embolism Or Thrombosis.
5. Tortion Of Pedicle e.g. Twisted Ovarian Cyst, Spleen etc. [56,57]
6. Colics e.g (I) Biliary, (II) Ureteric, (III) Appendicular And (IV) Intestinal
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(B) Extra-Abdominal Causes;
1. Parietal Conditions e.g. Superficial Cellulitis Of The Abdominal Wall, Gas Gangrene Of The Abdominal Wall, Abscess Of The Abdominal Wall, Rupture Of Rectus Abdominis Muscle And/Or Tearing Of Inferior Epigastric Artery.
2. Thoracic Conditions e.g. Diaphragmatic Pleurisy, Lobar Pneumonia, Spontaneous Pneumothorax, Pericarditis, Angina Pectoris, Coronary Thrombosis Etc.
3. Retro-Peritoneal Conditions e.g. Uremia, Pyelitis, Dietl’s Crisis, Retroperineal Lymphangitis And Lymphadenitis, Leaking Aneurysm Of The Aorta, Dissecting Aneurysm Of The Aorta Etc.
4. Diseases Of The Spine, Spinal Cord And Intercostal Nerves e.g. Pott’s Disease, Acute Osteomyelitis Of Lower Dorsal Or Lumbar Vertebrae, Gastric Crisis In Tabes Dorsalis, Herpes Zoster Of Lower Intercostal Nerves And Intercostal Neuralgia.
5. General Diseases e.g. Malaria, Typhoidfever, Prophyria, Diabetic Crisis, Sickle Cell Anaemia, Haemophilia, Purpura, Small Pox, Etc. [5,6,7,8]

(C) Paediatric Patients; Acute Appendicitis; Intussusception; Intestinal Obstruction By Round Worms, Congenital Bands Including Meckel’s Diverticula; Meckel’s Diverticulitis; Primary Peritonitis. [35,36,37]

(D) Female Patients; Ruptured Ectopic Gestation; Ruptured Lutein Cyst; Twisted Ovarian Cyst; Acute Salpingitis; Tubo-ovarian Abscess; Torsion Or Degeneration Of A Uterine Fibroid.


(F) Rare Causes: HIV, Pre Herpetic Pain Rt. X, XI, Dorsal Nerve, Tabetic Crisis, Spinal Conditions (T.B., Metastasis, Osteoporosis, Multiple Myeloma), Porphyria, Diabetes, Abdominal Crisis, Typhilitis, Lukaemic Ileo-Caecal Syndrome. [9,10]

The Above Listed Pain Abd. Causes, Subjected To Discrete ‘Clinico-Investigatory Analysis’ Formed The Basis Of The Proposed Appropriate Tt. [29,30,31,32,33,34]

‘SPECIFIC MANAGEMENTS’; Needed Surgical (+) Supportive Measures For;
Urolithiasis, Crystalluria, UTIs Etc [28]
Other Chr. Diseases; Diverticular Diseases, Polyposis, Ulcerative Colitis, Crohn’s Disease, IBS Etc, Volvulus, Malignancies, Acute Mesenteric Vascular Occlusion, Abdominal Aortic Aneurysm & Others. [Table-1 & 2]
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“COLONIC THUMB PRINTING”

VASCULAR DISORDERS;
Occlusive Vascular Disease
Intra-Mural Haemorrhage(Anti-coagulants, Bleeding Diathesis)
Traumatic Intra-Mural Haematoma
Haemolytic-Uraemic Syndrome
Hereditary Angio-Neurotic Oedema

INFLAMMATORY DISORDERS;
Ulcerative Colitis
Crohn’s Disease
Recurrent Mesenteritis

INFECTIONOUS DISORDERS;
Amebiasis
Schistosomiasis
Cyto-Megalovirus
Strongyloidiasis
Pseudo-Membranous Colitis
Typhilitis
Staphylococcus Colitis
Anisakiasis

NEOPLASTIC DISORDERS;
Lymphoma
Haemato-Geneous Metastasis

MISCELLANEOUS DISORDERS;
Amyloidoses
Endometriosis
Diverticulitis or Diverticulosis
Mesenteric or Peritoneal Lesions
Pneumatosis Cystoides Coli

“ISCHAEMIC COLITIS CAUSES”

1. Thrombosis
AtherSclerosis
PolyCythemia Vera
Portal Hypertension
Colonic Malignancies
Hyperviscosity Syndrome Platelet Abnormalities
High Mol.Wt. Dextran Infusion

2. Embolism
Left Atrium(Atrial Fibrillation)
Left Ventricle(Myocardial Infarction)
Aortic Atheromatous Plaque

3. Vasculitis
PolyArthritis Nodosa
Lupus Erythematosus
Giant Cell Arteritis(Takayasu’s Arteritis)
Buerger’s Disease
Hench-Schonlein Disease

4. Iatrogenic Vascular Trauma
Aortic Reconstruction
Adjacent Intestinal Resection-Anastomosis

5. Non-Occlusive Ishaemia
Shock-Septic/HypoVolueamic
Congestive Cardiac Failure
Spontaneous Ischaemic Colitis

Gender (female) Specific Entities: Menstrual Disorders From Menarchae To Menopause; Of Varying Aetio-Pathogenesis, Extent, Age Group, Child Birth Related,
PID, White & Or Other P.V Discharges, T.O Masses Of Different 
Aetio-Pathogenesis, Extent, Epsilateral & Or Contralateral Tumors: Fibroids, Malignancies & Others. [24,25,26,27,]

The GROUP ‘A’ Patients After Exclusion Of, Varibly Different Probable Listed Causes Beside Appendicitis, As For GROUP ‘B’ Patients, Were Comprehensively Studied For Different Likely Causes, Especially In Acute Presentations:
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“APPENDICEAL LESIONS”
Post-Operative(Inverted Stump, Adhesions)
Acute Appendicitis, Calculus, Faecolith, Abscess
Diverticulosis, Intussusception, Invagination.
Mucocoele, Carcinoid Tumour, Myxoglobulusis,
Adeno-Carcinoma, Spindle Cell Tumour
Metastasis,Lymphoma, Endometrial Implantation
Crohn’s Disease,Ulcerative Colitis
Amoebiasis,Ascariasis,Tuberculosis,Trichuriasis,Typhoid Fever

“ENLARGED ILEO-CAECAL VALVE”
Normal Variant
Intussusception, Ileo-Colic Prolapse
Intra-Mural Haematoma, Cathartic Abuse.
Crohn’s Disease, Tuberculosis, Typhoid Fever, Amoebiasis, Yersinia Entero-Colitis
Actinomycosis, Antiakisis.
Fatty Infiltration, Lipoma, Lymphoma
Carcinoid, Lymphoid HyperPlasia, Villous Adenoma, Adeno-Carcinoma

“CAECAL FILLING DEFECTS”
General Causes Of Colonic Filling Defects
Appendiceal Lesions, Intussusception Of Appendix, Maeckel’s Diverticulum,
Lymphoma, Distal Ileum Diverticulitis
Ameboma, Lipomatous Ileo-Caecal Valve,
Adherent Faecolith(Cystic Fibrosis)
Solitary Benign Ulcer, Burkitt’s Lymphoma, Metastasis(Pancreas, Ovary, Colon, Stomach)

[TABLE-3,4,5] Post Surgical Group ‘A’ Patients;In Addition To Routine Causes
Were Comprehensively Evaluated
& Managed For Common Definitely CausativeClinical Entities:

V. ‘ILEO-CAECAL REGION PATHOLOGIES’
The Clinical Entities Involving, Anatomico-functional Changes Of Ileo-Caecal Region, Clinically Manifesting As Symptoms, Simulating Variable Extents Of ‘Intestinal Colics’ To ‘Obstructive Features’, With Demonstrable Angulations Of Different Varieties; Acute, Obstuse Etc, As Evident By; Double Contrast Digital Radiography, CECT, Diagnostic Laproscopy & Endoscopy Etc., Need Appropriate Surgical Corrections Of Ileo-caecal Region Obstructive Variants.

Aetio-Pathogenesis:
1. The Competion To Perform ‘Appendecectomy’, By Smallest Possible Cosmetic Incisions Without Proper Exploration Of About 1Ft. Of Small Intestine For Various Anatomical Variations?Diverticular & Or Other Disease, Anatomical Position Of Appendix, Meso-Appendix Status, Per-Operative Assessment Of I-C Region For Associated Adhesions, Lymph-Adenitis,& Or Other Common Pathologies. [46]

Patho-Physiology: The InDiscretely Applied ‘Purse String Sutures’ & Or Other Technique For ‘Stump Invagination’ Procedures During Appendecectomy, Being The Most Important Aetiology Factor For Resultant Morpho-Physiological Changes In The IC Region, Manifesting As Obstructive Symptoms Like Intestinal Colics & Or Otherwise, Effecting Propulsive PressurePeristalsis From Ileum To Caecum (IC Valve), And Further Forward Towards Ascending Colon Upwards, As Evident By Closely Monitored Digital Contrast Radiography, Diagnostic Laproscopy, Exploratory Laprotomy Etc.

Thus The Operative Recommendations For- By On Needle TransFixation
& Or ‘Free Tie’ Methods, Using Absorbable Suture ,Firmly Secured,Less Than 1 Cm, Disinfected ‘Appedecectomy Stump’ Prevents Of FUCs Of ‘Stump Appendicitis’ Occurrence, While Safely Excluding The Need For ‘Stump Invagination Procedures’
There By Minimizing Iatrogenic’IC Region’ Anatomico-Functional Changes
e.g Commonly Encountered Angulations Of Different Varieties, Leading To Obstructive Symptoms Of Variable Dimensions. [FIGURE-1]
3. Extent Of Inflammatory Changes In The IC Region, Stages Of ‘Appendicular Lump’ Formation, Appendicular Abcess, Gangrene, Necrosis, Perforation Etc.

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4. Different Variables Of ‘Catarrhal Appendicitis’. Recent Increased Prevalence, With Difficult Diagnosis & Management, D/TPaediatric Age Group Prevalence, Masked Viral Manifestations, Rapidly Progressive Disease Course, Comparative Low Susceptibility To Available Medications.

Treatment Modalities: For Resultant Ileo-Caecal Region Anatomico-Functional Changes (?Different Angulations Varieties) [FIGURE-2]
With Well-Documented Clinico-Investigatory Evidence, Include-

1. Adhesionolysis & Anatomy Restorage
2. Resection Anastomosis Of Variable Extents? Terminal Ileum To Caecum Involving Taenia Region/Just Adjacent Ascending Colon With/Without Resections. Thus Avoiding Surgical Trauma & ‘Dump Syndromes’, While Maintaining Adequate IC Valve Competency Etc.

2. ‘DIVERTICULAR DISEASE VARIANTS’
Diverticulae: Small Protrusions/ Outpouches Formed Of Various Layers Of GI Tract At Different Level Of Its Course.
Maeckel’s Diverticulum: Most Common Congenital Anomaly Of Small Intestine, Equal Male/Female Incidence Ratio. [FIGURE-3]
Clinical Evaluation: Uncomplicated (Simple Diverticulitis), Complicated Diverticulitis; Peritonitis, Perforation, Hemorrhage, Obstruction, MalAbsorption & Associated Diseases.

‘Congenital GIT Duplications’: Occur In Conjunction With Other Malformations Congenital, Accquired; D/T Involvement & Atrophy Of Muscularis Mucosa Propria, Attain Large Sizes, (e.g Giant Colonic Diverticula)


Histology: EctoDermal, EndoDermal, HeteroTrophic Endodermal Elements e.g Gastric HeteroTropia[47,48,49,50,51]

Reported Several Cases, Introverted / Invaginated Diverticulum (Intussusception)

3.‘MOBILE CAECUM’
Not An Uncommon Clinical Entity, Clinically Evident As: Palpable, Tubular, Structure In R.I.F, Rolls Within The Palpating Fingers
An Important Attributable Cause, For Rec.Rt. Lower Abdominal Pain With /Without Previous Appendectomy Or Other Surgery, Some Times Simulates ‘Intestinal Colics’ In Severity. After Excluding & Or Managing Other Medical & Or Surgical Causes.
The Simple, Safe, Easily Performed ‘Surgical Management’, Ensured Symptom Free Life To Large No. Of Patients.
Operative Technique:Several Patients Recorded Almost Complete Cure By,“Caecopexy”:Fixation Of Caecum Laterally,To Rt. Paracolic Gutter Peritoneum,By Few (About 2-4) Meticulous Stiches, Sero-Muscular Depth,Using Non-absorbable Or Delayed Absorbable Sutures( Good Results Achieved With Prolene/Vicryl 1-0/2-0, R.B).
[FIGURE- 6]

[FIGURE-6]

Laparoscopic Approach, Is Also Successful, As An Independent Or Concomitant Procedure.

4.‘ADHESIONS’
Intra-Abdominal /Peritoneal Adhesions:Generalized, Diffuse & Or More Lower Abdominal, With/Without H/o Previous Surgery(Single & Or Multiple) e.g Appendectomy, LSCS, Tubectomy& Or Other Abd./Pelvic Surgical Procedures
Aetio-Pathogenesis:?Post-operativeCauses;Hge.Infection,DerrangedHealing e.g Anaemia, Nutritional,Malignancy Etc. & As Manifestation Of Gen. Disease Processes e.g TB
Dx: 1. Specific Invs; ESR, Montoux, Serology, Immunology Etc.
2. Radio-Diagnostic Measures; X-Rays, USG, CECT, MRL.Contrast Radiology
3. Diagnostic Laparoscopy & Or Exploratory Laprotomy; Important Significant Role As Diagnostic & Therapeutic Tool.[FIGURE- 7]

[FIGURE-7]
Treatment: ‘Adhesiolysis’ & Causative Specific Diseases Management - Role Of Peritoneal Lavage/Instillation Solutions e.g Low/High Molecular Weight Dextrans & Others, Have Been Differently Reported.

5. ‘SIGMOID VOLULUS RECURRENCE’
The Recurrence With Previous H/o: Conservative & Or Surgical Management Enunciates Need For More Definitive Surgical Procedure, Based Upon ‘Anatomico-Functional Preservation Of Organ’ Principles.

‘Sigmoido-Pexy’: Fixation Sutures; (About 2-4, Non-absorbable / Delayed Absorbable, Interrupted, Appropriate Depth), From Lateral Wall Colon To Lt. Paracolic Gutter / Pelvic Peritoneum.
Laparoscopic Approach: Successful Results. [FIGURE-8]

FIGURE-8
The Discussed Treatment Modality; Can Be Performed As II Stage Emergency Procedure With De-Rotation Of Rec. Sigmoid Volvulus Or Primary ‘Operation Of Choice’. In Collaboration With Supportive Management Measures: Diet Regulation Counselling Etc.

Extensive Resection, Anastomosis, Exteriorization Procedures,
Can Be Avoided Judiciously, In Accordance To,
‘Organ’s Vascular Status Safety Profile’.

6. ‘UROLITHIASIS’
In Certain Study Groups From Particular Geographical Distribution Regions, Appropriate Management Of Clinically Diagnosed & Or Evidently Manifested Urolithiasis,

Almost All Of These Patients Were Able To Be Successfully Managed By,
Awareness & Strict Compliance Adherence To, ‘Stone Analysis’ Spectroscopy Based Scientifically Designed Dietary Regulations,
Supplemented With Stone Disease ‘Medical Therapy’ & Or, Appropriately Adequate Management Of UTI,
Usually Associated With Uro-Lithiasis.

Medical Management:
- Forced Diuresis (LASIX THERAPY); FORCED DIURESIS (LASIX THERAPY);
Done for stones Size up to 5-8 mm, Remnant Post-ESWL stones.

Recommended ideal forced diuresis regimen: Complete compliance achievement ensures promising good results,
5% DNS ≈ 1,500 ml (3 vacs)
(+ ) R/L ≈ 1,500 ml (3 vacs)
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(Alternating) In 24 hours, Repeat for 3 days.
Inj. Lasix 1 amp. Im, after (II) and (IV) Vac (Regular BP Monitoring).
The Role Of Injection Drotaverine (Drotin), Hyoscin[Buscopan], Diclofenac (Voveran) BD/TDS, Is To Achieve Round The Clock Analgesia And Spasmolytic Effect, As Needed.

The Complete Treatment Schedule Duration Varies From 1 To 4 Days. The Patient Encouraged For High Fluid Intake With Normal Diet, To Ensure About >1.5 To 2 Litres/24 Hrs. Urine Output. Straining Of All Urine Is Done To Filter Passed Stone Particles (Stone Analysis Sampling).

- Medications;Commonly Used Preparations: Zyloric (Allopurinol)—uricemia (S. Uric Acid ≥7 M%) Decreases S. Uric Acid And Thus Disintegrating Uric Acid (Invisible) Component Of Stones.

Urinary Alkalizers, Cystone, Neeri, Distone, Calcury, Smash, Expel,Nephrol And Various Other Ayurvedic Preparations., Are In Common Practice (? Geographical Stone Composition).

Tamsulosin (0.4) OD (Breakfast): Relieving Lower Urinary Tract Syndrome, Obstructive Uropathy Symptoms, Thus Facilitating Downward Stone Movement And Passage With Urine, Supported By Mefenamic Acid And Drotaverine Preparations (Tab. Drotin-m, Etc.).
The Role Of Aminophylline, Nifedipine And Deflazacort And Other Hormonal Preparations Has Been Reported.

- Diet Regulation; Awareness & Strict Compliance Adherence To, ‘Stone Analysis’ Spectroscopy Based Scientifically Designed Dietary Regulation Regimes

Besides Controversially Successful Various Medical Therapy Regimes, And OSS (Classical Open Surgical Stone Extraction), Other Methods Include:
(1) Percutaneous Nephrolithotomy(PCNL) For Renal Calculi,
(2) Retrograde Ureterorenoscopic Intrarenal Surgery,
3) Ureterorenoscopy (URS) And Lithoclast For Ureteric Calculi,
(4) Laparoscopic Ureterolithotomy.
(5) Cystolithomcy/Cystolithoclast For Vesical Calculi,Using Lithotrite,
(6) Sandwich Technique (ESWL + PNL/Ureterorenoscopic Lithotripsy Surgery),
(7) Urethral Stone Extractions Etc.

VI. ‘Results’
The,Comprehensive Meticulous Clinico-investigatory Methodology,
For Diagnosis Of Relevant Specific Cause With Precision & Accuracy,
By Available Within Reach Investigatory Resources & Subsequent Treatment Plan Aided At Curetive & Or Maximally Palliative Overall Result Out Comes,
Hundreds Of Patient Have Been Relieved,Of Cumbersome Agony Of Rec. Abdominal Discomforts,By Recommended Treatment Plan Guidelines,Medications, Life Style Regulations Etc. [62,63,64]

Large Majority Of Cases Were Able To Be,Successfully Managed With;
(I) The Medical Management Of Properly Diagnosed,Disease Specific Treatment Of:
Various Infestations, Infections, Inflammations e.g Amebiasis, Typhilitis, Worm Infestations,Tuberculosis, Chr. Mesenteric Lymphadenitis Of Variable Origins & Different Variable Causes Of ‘Intestinal Colics’, Including Irritable Bowel Syndrome,Crohn’s Disease,Ulcerative Colitis Etc.


(II) FEMALE PATIENTS: Constituting A Large Group Statistically.
A Significant No. Of Patients, With Diagnosis & Management AwareNess Of Various Listed Problems e.g P.I.D, UTI Etc.Were Completely Symptom Free.
The Specialized Management Of Existing GynaecologicalPathologies e.g Fibroids, T.O Lesions, Endometriosis,Different Stages Of Malignancies Etc.,Were Of Definitive/Supportive Help.
(IV) PAEDIATRIC PATIENTS: Cautiously Secured Compliance, Clinico-Diagnostic Approach For Different Known Clinical Entities Being Mandatory.

(V) A Considerable No. Of Patients, from Different Occupations; Office Workers, Manual Labourers Etc With Long Duration Abd. Pain, Not Properly Diagnosed For Years; Diagnosed By Discrete Clinical Exam. - Observation Of Simple Plain X-ray


Prior Cautious Exclusion & Or Management Of Other Visceral Causes Was Secured, By Clinico-diagnostic Methods, USG Etc. . [FIGURE- 9]

FIGURE-9

X-RAY ABDOMEN K.U.B
Note- Intervertebral Disc Spaces Upper & Lower Lumbar Vertebra

(VI) The Comparatively Small, Yet The Most Important Group Of Patients, With Diagnosed Uncommon Clinical Entities, Especially Were Managed With The Surgical Management Modalities Including ‘Innovatives Techniques’, Include:

- Remmanant Stump Appendectomy,
- Maceckel’s & Or Other Adjoining Diverticular Disease Variants,
- Corrections Of Ileo-caecal Obstructive Lesione, g Angulations; Acute, Obstuse & Or Otherwise, Effecting Propulsive Peristalsis Pressure From Ileum To Caecum (I.C Valve), And Further Forward Towards Ascending Colon Upwards & Resultant ‘Intestinal Colic’, As Evident By Closely Monitored Digital Contrast Radio-diagnosis, Diagnostic Laproscopy, Exploratory Laprotomy Etc.
- Mobile Caecum: Caeco-pexy,
- Sigmoid Volvulus Recurrence Variants: Sigmoidopexy
- Adhesions: Different Aetio-Pathogenesis & Extents
Others…

VII. ‘Conclusion’


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