upper pole calculus

upper pole calculus is a term that refers to the formation of kidney stones specifically located in the upper pole of the kidney. This condition poses unique challenges due to the anatomical and functional characteristics of the upper pole, which can complicate both diagnosis and treatment. In this article, we will explore the causes, symptoms, diagnosis, and treatment options related to upper pole calculus. We will also discuss preventive measures and the implications of untreated upper pole stones on kidney health. By the end of this comprehensive guide, you will have a thorough understanding of upper pole calculus and how it can be effectively managed.

Understanding Upper Pole Calculus

Upper pole calculus refers to kidney stones that develop in the upper part of the kidney, known as the upper pole. These stones can vary in size, composition, and location, and they often lead to significant discomfort and complications. The upper pole of the kidney has a distinct anatomical structure that can hinder the natural passage of stones, making them more prone to causing obstruction and pain. Understanding the characteristics of upper pole calculus is crucial for effective management and treatment.

Anatomy of the Upper Pole

The upper pole of the kidney is where urine is collected before it flows into the ureter. This region is characterized by its unique blood supply and drainage patterns, which can influence stone formation and retention. The renal pelvis, located in this area, serves as a funnel for urine, and any obstruction caused by a stone can lead to increased pressure and pain.

Types of Kidney Stones

Kidney stones can be classified into several types based on their composition, including:

- **Calcium Oxalate Stones:** The most common type, formed from calcium and oxalate.
- **Struvite Stones:** Often associated with urinary tract infections, consisting of magnesium, ammonium, and phosphate.
- **Uric Acid Stones:** Formed when urine is overly acidic, associated with certain metabolic conditions.
- **Cystine Stones:** Rare stones caused by a genetic disorder affecting amino acid transport.

Causes of Upper Pole Calculus

Several factors contribute to the formation of upper pole calculus. These factors can be intrinsic, such as genetics and metabolic disorders, or extrinsic, such as dietary habits and hydration status. Understanding these causes is vital for prevention and treatment.

Metabolic Factors

Individuals with metabolic disorders, such as hypercalcemia or hyperuricosuria, are at a higher risk of developing kidney stones. These conditions lead to increased levels of calcium or uric acid in the urine, promoting stone formation.

Dietary Influences

Diet plays a significant role in stone formation. High intake of sodium, oxalate-rich foods, and inadequate fluid consumption can increase the likelihood of developing upper pole calculus. It is essential to be aware of dietary choices to mitigate this risk.

Genetic Predisposition

Family history can significantly influence an individual's susceptibility to kidney stones. Genetic factors may affect how the body metabolizes certain substances, leading to an increased risk of stone formation.

Symptoms and Diagnosis

Identifying upper pole calculus involves recognizing its symptoms and employing diagnostic techniques. Symptoms can vary from mild discomfort to severe pain, depending on the size and location of the stone.

Common Symptoms

Patients with upper pole calculus may experience the following symptoms:

- **Severe Pain:** Typically felt in the flank or lower back, which can radiate to the abdomen or groin.
- **Hematuria:** Blood in the urine, resulting from irritation or injury to the urinary tract.
- **Nausea and Vomiting:** Often accompanying severe pain, resulting from the body's response to pain.
- **Frequent Urination:** A feeling of urgency or need to urinate more often than normal.

Diagnostic Methods

To accurately diagnose upper pole calculus, healthcare providers utilize various imaging techniques and laboratory tests:

- **CT Scan:** The most effective imaging method for visualizing stones.
- **Ultrasound:** Useful in certain populations, such as pregnant women, to avoid radiation.
- **X-rays:** Can help identify certain types of stones, although not all stones are visible on X-ray.
- **Urinalysis:** Helps detect the presence of blood, crystals, and signs of infection.

Treatment Options

Treatment for upper pole calculus depends on the size of the stone, the symptoms experienced, and the overall health of the patient. Understanding the available treatments is essential for effective management.

Conservative Management

Small stones may pass naturally without intervention. Conservative management includes:

- **Hydration:** Increasing fluid intake to help flush the stones.
- **Pain Management:** Using NSAIDs or prescription medications to alleviate pain.

Minimally Invasive Procedures

If stones do not pass naturally or cause significant symptoms, minimally invasive procedures may be employed:

- **Ureteroscopy:** A thin tube is passed through the urethra to remove the stone.
- **Shock Wave Lithotripsy (SWL):** Uses sound waves to break stones into smaller pieces.

Open Surgery

In rare cases where stones are large or complicated, open surgery may be necessary. This approach is less common due to the availability of less invasive techniques.

Prevention Strategies

Preventing upper pole calculus involves lifestyle and dietary changes aimed at reducing the risk factors associated with stone formation. Implementing effective strategies can significantly lower the chances of recurrence.

Hydration

Staying well-hydrated is one of the most effective ways to prevent kidney stones. Aim for a daily fluid intake of at least 2 to 3 liters, mainly through water.

Dietary Modifications

Adjusting your diet can also play a crucial role in prevention:

- Limit sodium intake to reduce calcium excretion.
- Reduce oxalate-rich foods such as spinach, beets, and nuts if prone to calcium oxalate stones.
- Increase intake of fruits and vegetables to promote overall kidney health.

Implications of Untreated Upper Pole Calculus

Failing to address upper pole calculus can lead to serious complications. The potential risks associated with untreated stones include:

Obstruction and Hydronephrosis

Stones can obstruct the urinary tract, leading to hydronephrosis, a condition characterized by the swelling of the kidney due to urine accumulation. This can cause significant kidney damage if left untreated.

Infection

Obstruction from stones increases the risk of urinary tract infections, which can lead to more severe complications if bacteria ascend to the kidneys.

Kidney Damage

Chronic obstruction and repeated infections can result in permanent kidney damage, potentially leading to kidney failure in severe cases.

Impact on Quality of Life

Persistent pain and complications from upper pole calculus can significantly affect an individual's quality of life, leading to lost productivity and increased healthcare costs.

Conclusion

Upper pole calculus represents a significant medical condition that requires attention and understanding. By recognizing its causes, symptoms, and treatment options, individuals can take proactive steps toward prevention and management. Maintaining good hydration, a balanced diet, and regular medical check-ups can greatly reduce the risk of developing kidney stones. Early intervention and awareness are key to preserving kidney health and ensuring a better quality of life.

Q: What is upper pole calculus?

A: Upper pole calculus refers to kidney stones that form specifically in the upper part of the kidney, which can lead to pain and complications due to their location.

Q: What causes upper pole calculus?

A: The causes of upper pole calculus include metabolic disorders, dietary influences, and genetic predisposition that increase the likelihood of stone formation.

Q: What symptoms are associated with upper pole calculus?

A: Symptoms include severe flank pain, hematuria (blood in urine), nausea, vomiting, and frequent urination, which indicate potential obstruction or irritation in the urinary tract.

Q: How is upper pole calculus diagnosed?

A: Diagnosis is typically made through imaging techniques such as CT scans and ultrasounds, along with urinalysis to check for blood and crystals in the urine.

Q: What treatment options are available for upper pole calculus?

A: Treatment options vary based on the size of the stone and can include conservative management, minimally invasive procedures like ureteroscopy and shock wave lithotripsy, or open surgery in rare cases.

Q: How can upper pole calculus be prevented?

A: Prevention strategies include staying well-hydrated, making dietary modifications to lower sodium and oxalate intake, and maintaining a healthy lifestyle to reduce risk factors.

Q: What are the complications of untreated upper pole calculus?

A: Untreated upper pole calculus can lead to complications such as urinary obstruction, hydronephrosis, kidney infections, and permanent kidney damage if not addressed promptly.

Q: Is upper pole calculus more common in certain populations?

A: Yes, individuals with a family history of kidney stones, certain metabolic disorders, and those with specific dietary habits are at a higher risk of developing upper pole calculus.

Q: What role does hydration play in preventing kidney stones?

A: Adequate hydration dilutes urine, reducing the concentration of stone-forming substances, thus helping to prevent the formation of kidney stones, including upper pole

calculus.

Q: Can lifestyle changes really make a difference in preventing upper pole calculus?

A: Yes, lifestyle changes such as increased water intake, dietary adjustments, and maintaining a healthy weight can significantly reduce the risk of developing upper pole calculus.

Upper Pole Calculus

upper pole calculus: CT Urography Stuart G. Silverman, Richard H. Cohan, 2007 Featuring over 500 images, this atlas is the first text on performing and interpreting CT urography. Chapters detail the indications and techniques for CT urography, review the risks of radiation exposure, show how normal urinary tract anatomy and variants appear on CT scans, and demonstrate a wide range of urinary tract abnormalities as they appear on thin-section CT. The final chapter illustrates artifacts and diagnostic pitfalls. Chapters on abnormalities follow a case-based teaching file format. Each case is presented on a two-page spread, with images and succinct discussion of the entity and how CT urography was used to diagnose it.

upper pole calculus: Smith's Textbook of Endourology Glenn Preminger, Gopal H. Badlani, Louis R. Kavoussi, 2012-03-12 Accompanying DVD-ROM, in pocket at front of v. 1, contains ... video clips referenced in the text.--DVD-ROM label.

upper pole calculus: Renal Calculus Leslie N. Pyrah, 2012-12-06 Stone in the urinary tract has fascinated the medical profession from the earliest times and has played an important part in the development of surgery. The earliest major planned operations were for the removal of vesical calculus; renal and ureteric calculi provided the first stimulus for the radiological investigation of the viscera, and the biochemical investigation of the causes of calculus formation has been the training ground for surgeons interested in metabolic disorders. It is therefore no surprise that stone has been the subject of a number of monographs by eminent urologists, but the rapid development of knowledge has made it possible for each one of these authors to produce something new. There is still a technical challenge to the surgeon in the removal of renal calculi, and on this topic we are always glad to have the advice of a master craftsman; but inevitably much of the interest centres on the elucidation of the causes of stone formation and its prevention. Professor Pyrah has had a long and wide experience of the surgery of calculous disease and gives us in this volume something of the wisdom that he has gained thereby, but he has also been a pioneer in the setting up of a research department largely concerned with the investigation of this complex group of disorders, so that he is able to present in terms readily intelligible to the general medical reader the results of extensive biochemical investigation in this area.

upper pole calculus: Duke Radiology Case Review James M. Provenzale, Rendon C. Nelson, Emily N. Vinson, 2012-01-19 Residents, fellows and practicing radiologists who are preparing for

certification exams (the current ABR Part II oral, the future ABR Core and Certifying, CAQ and MOC) will find the new edition of this case-based review book an indispensable tool for success. Duke Radiology Case Review has long been considered one of the standards in board review, and is a well-known adjunct to the popular and well-attended board review course given by the prestigious Department of Radiology at Duke University. Close to 300 case presentations are structured to align with the way residents are taught to work through patient cases. Divided by body region and including chapters on interventional radiology and nuclear medicine, each case offers a clinical history, relevant images, and bulleted points describing the differential diagnosis. This is followed by the actual diagnosis and key clinical and radiologic facts about the diagnosis and suggested readings. This edition includes a new chapter on cardiac imaging.

upper pole calculus: *Minimally Invasive Urological Surgery* Robert G. Moore, Jay T. Bishoff, Stefan Loenig, Steven G. Docimo, 2005-01-25 Practical and easy to use, this superbly illustrated text will provide the trainee with diagnostic and surgical guidance, tips and tricks, and a good solid background to the use of minimally invasive urological surgery techniques. The editors, all experts in urological laparoscopy, have chosen an elite team, mainly from the USA and Germany,

upper pole calculus: Advanced Endourology Stephen Y. Nakada, Margaret S. Pearle, 2007-11-05 Leading national and international urologists in the field of endourology describe standard and advanced endoscopic procedures for treating upper-tract pathology. The authors provide step-by-step instructions for the latest endoscopic procedures, ranging from upper urinary tract calculi and strictures to urothelial cancer. Advanced Endourology: The Complete Clinical Guide offers practicing urologists and urology residents not only a comprehensive, illustrated guide to endourological techniques-particularly the more advanced procedures-but also a practical means to expand the range and scope of the procedures they perform.

upper pole calculus: Medical Department Army: Surgery in World War II, Neurosurgery, V.2 United States. Army Medical Service, 1959

upper pole calculus: Neurosurgery United States. Army Medical Service, John Boyd Coates (Jr.), 1959

upper pole calculus: Neurosurgery John Boyd Coates (Jr.), Roy Glen Spurling, Barnes Woodhall, 1959

upper pole calculus: The Medical Department of the United States Army in World War II. United States. Army Medical Service, 1959

upper pole calculus: Medical Imaging for Health Professionals Raymond M. Reilly, 2019-01-22 Describes the most common imaging technologies and their diagnostic applications so that pharmacists and other health professionals, as well as imaging researchers, can understand and interpret medical imaging science This book guides pharmacists and other health professionals and researchers to understand and interpret medical imaging. Divided into two sections, it covers both fundamental principles and clinical applications. It describes the most common imaging technologies and their use to diagnose diseases. In addition, the authors introduce the emerging role of molecular imaging including PET in the diagnosis of cancer and to assess the effectiveness of cancer treatments. The book features many illustrations and discusses many patient case examples. Medical Imaging for Health Professionals: Technologies and Clinical Applications offers in-depth chapters explaining the basic principles of: X-Ray, CT, and Mammography Technology; Nuclear Medicine Imaging Technology; Radionuclide Production and Radiopharmaceuticals; Magnetic Resonance Imaging (MRI) Technology; and Ultrasound Imaging Technology. It also provides chapters written by expert radiologists in well-explained terminology discussing clinical applications including: Cardiac Imaging; Lung Imaging; Breast Imaging; Endocrine Gland Imaging; Abdominal Imaging; Genitourinary Tract Imaging; Imaging of the Head, Neck, Spine and Brain; Musculoskeletal Imaging; and Molecular Imaging with Positron Emission Tomography (PET). Teaches pharmacists, health professionals, and researchers the basics of medical imaging technology Introduces all of the customary imaging tools—X-ray, CT, ultrasound, MRI, SPECT, and PET—and describes their diagnostic applications Explains how molecular imaging aids in cancer diagnosis and in assessing

the effectiveness of cancer treatments Includes many case examples of imaging applications for diagnosing common diseases Medical Imaging for Health Professionals: Technologies and Clinical Applications is an important resource for pharmacists, nurses, physiotherapists, respiratory therapists, occupational therapists, radiological or nuclear medicine technologists, health physicists, radiotherapists, as well as researchers in the imaging field.

upper pole calculus: The Urologic and Cutaneous Review , 1918

upper pole calculus: *Annals of Surgery* , 1907 Includes the transactions of the American Surgical Association, New York Surgical Society, Philadelphia Academy of Surgery, Southern Surgical Association, Central Surgical Association, and at various times, of other similar organizations

upper pole calculus: The Unofficial Guide to Radiology: 100 Practice Abdominal X-rays Patrice Eastwood, Ali B.A.K. Al-Hadithi, Zeshan Qureshi, 2023-06-16 The unique and award-winning Unofficial Guides series is a collaboration between senior students, junior doctors and specialty experts. This combination of contributors understands what is essential to excel on your course, in exams and in practice – as well as the importance of presenting information in a clear, fun and engaging way. Packed with hints and tips from those in the know, when you are in a hurry and need a study companion you can trust, reach for an Unofficial Guide. This case-based guide teaches systematic analysis of abdominal X-rays for everyone from complete beginners to professionals. Readers practise X-ray interpretation on 100 high quality images based on real-life scenarios alongside questions that test their overall clinical knowledge. Over each page is a model report accompanied by a fully annotated version of the X-ray to explain the answer's reasoning. 100 Practice Abdominal X-Rays is ideal for students preparing for examinations and will also provide a handy reference for postgraduates and practising doctors. - 100 high-definition images, just like real-life X-rays - Full-colour annotations demystify abdominal X-rays for complete beginners - Systematic examples of how to present reports in an exam and on a hospital ward round - Follows international radiology reporting guidelines - Matched to the Royal College of Radiologists national curriculum - New bonus questions to allow the reader to test their knowledge and cement their learning

upper pole calculus: *New Techniques in Uroradiology* Sameh K. Morcos, Richard H. Cohan, 2006-04-13 This comprehensive reference discusses the use of ultrasound, computed tomography (CT), magnetic resonance imaging (MRI), and radioisotopes in the imaging of the adult and pediatric urinary tract. With contributions by leading authorities in the field, this source covers a wide array of uroradiological topics ranging from the use of MRI or multisli

upper pole calculus: Nutritional and Medical Management of Kidney Stones Haewook Han, Walter P. Mutter, Samer Nasser, 2019-07-12 This text comprehensively covers the nutritional and medical management and prevention of kidney stones. Sections address types of stones, nutritional risks, medical and pharmaceutical managements, prevention of recurrence, and special consideration of stone risks among specific diseases such as obesity with gastric bypass, chronic kidney disease, and gastric intestinal disorders. Diagnosis of kidney stones, urinalysis and biochemical indices, dietary assessment, and medical nutrition therapy for specific types of kidney stones are also included. In addition, case studies are provided in the appendix. Cutting edge research is also highlighted in regards to pharmaceutical treatments and epidemiological findings in nutrition and kidney stones. Nutrition in Medical Management of Kidney Stones will be a practical resource for health professionals in the fields of nutrition, nephrology, urology, and general medicine, as well as medical students, resident physicians, and allied health clinicians whose research, practice, and education includes nutrition and kidney stones.

upper pole calculus: *Urinary Stones* Michael Grasso, David Goldfarb, 2014-04-14 Acute urinary stones cause one of the most painful sensations the human body can experience, more painful than childbirth, broken bones, gunshot wounds or burns. Master your patient management with this comprehensive guide to a debilitating medical condition. Urinary Stones: Medical and Surgical Management provides urologists, nephrologists and surgeons with a practical, accessible

guide to the diagnosis, treatment and prevention of urinary stone disease. Divided into 2 parts – covering both medical and surgical management - leading experts discuss the key issues and examine how to deliver best practice in the clinical care of your patients. Topics covered include: Evaluation and management of stones in children Renal colic and medical expulsive therapy Imaging in stone disease: sonography, contrast based fluoroscopy, computed tomography and magnetic resonance urography Multimodality therapy: mixing and matching techniques to improve outcome Complications of stone disease Interpretation of 24 hour urine chemistry Prevention of recurrent calcium, uric acid, struvite and cystine stones The different surgical techniques, including: ureteroscopy, shockwave lithotripsy, ureteroscopic lithotripsy and percutaneous nephrostolithotomy Packed with high-quality figures, key points, and management algorithms, easy to follow, clear clinical guidance is supported by the very latest in management guidelines from the AUA and EAU. Brought to you by the best, this is the perfect consultation tool when on the wards or in the office.

upper pole calculus: Urolithiasis Margaret S. Pearle, Stephen Y. Nakada, 2009-09-29 Urolithiasis, or stone disease occurs in 7% of women and 12% of men at some point, and these statistics are rising. Furthermore, for those who form a stone, the likelihood of a recurrence is nearly 50% within 5 years of initial diagnosis. Therefore, the need for effective, minimally invasive alternatives for stone eradication and prevention is crit

upper pole calculus: *Surgery, Gynecology & Obstetrics* Franklin Henry Martin, 1919

upper pole calculus: Review Questions for Ultrasound J.A. Miller, 2018-12-18 This is a comprehensive, large-format review text with complete answers for the American national examination of the Registry of Diagnostic Medical Sonographers (RDMS). It contains 600 questions divided evenly between sections on physics, the abdomen and small parts, and obstetrics and gynecology. The authors combine many years of experience teaching diagnostic ultrasound and provide illustrative scans and drawings for added comprehension.

Related to upper pole calculus

UPPER Definition & Meaning - Merriam-Webster The meaning of UPPER is higher in physical position, rank, or order. How to use upper in a sentence

UPPER | definition in the Cambridge English Dictionary Idiom be on your uppers (Definition of upper from the Cambridge Advanced Learner's Dictionary & Thesaurus © Cambridge University Press)

Python String upper () Method - W3Schools Definition and Usage The upper() method returns a string where all characters are in upper case. Symbols and Numbers are ignored

Convert Case - Convert upper case to lower case, lower case to upper The capitalized case converter will automatically convert the starting letter of every word into an upper case and will leave the remaining letters as lower case ones

UPPER definition and meaning | Collins English Dictionary The upper of a shoe is the top part of it, which is attached to the sole and the heel. Wear well-fitting, lace-up shoes with soft uppers. Leather uppers allow the feet to breathe

UPPER Synonyms: 79 Similar and Opposite Words - Merriam-Webster Synonyms for UPPER: higher, uppermost, highest, loftier, topmost, top, loftiest, maximum; Antonyms of UPPER: lowest, lower, lowermost, underneath, under, below, nether, bottommost

UPPPER Official Store | Premium Fitness Gear – UPPPER Gear From building a powerful chest to sculpting your back and shoulders, these upper body machines are your ultimate tools for fast, effective muscle growth and strength

Best Route Planning Software – Take Upper's Free Trial Now! Discover the best route planning software with Upper. Optimize routes effortlessly and start your free trial now to boost delivery efficiency!

upper - Wiktionary, the free dictionary It is said in Tibetan culture, in order to understand the upper, it is necessary to understand the lower first. Once, the lower is understood, the upper is just an introductory

Upper - definition of upper by The Free Dictionary Define upper. upper synonyms, upper pronunciation, upper translation, English dictionary definition of upper. adj. 1. Higher in place, position, or rank: the upper bunk; the upper half of

UPPER Definition & Meaning - Merriam-Webster The meaning of UPPER is higher in physical position, rank, or order. How to use upper in a sentence

UPPER | definition in the Cambridge English Dictionary Idiom be on your uppers (Definition of upper from the Cambridge Advanced Learner's Dictionary & Thesaurus © Cambridge University Press)

Python String upper () Method - W3Schools Definition and Usage The upper() method returns a string where all characters are in upper case. Symbols and Numbers are ignored

Convert Case - Convert upper case to lower case, lower case to upper The capitalized case converter will automatically convert the starting letter of every word into an upper case and will leave the remaining letters as lower case ones

UPPER definition and meaning | Collins English Dictionary The upper of a shoe is the top part of it, which is attached to the sole and the heel. Wear well-fitting, lace-up shoes with soft uppers. Leather uppers allow the feet to breathe

UPPER Synonyms: 79 Similar and Opposite Words - Merriam-Webster Synonyms for UPPER: higher, uppermost, highest, loftier, topmost, top, loftiest, maximum; Antonyms of UPPER: lowest, lower, lowermost, underneath, under, below, nether, bottommost

UPPPER Official Store | Premium Fitness Gear – UPPPER Gear From building a powerful chest to sculpting your back and shoulders, these upper body machines are your ultimate tools for fast, effective muscle growth and strength

Best Route Planning Software – Take Upper's Free Trial Now! Discover the best route planning software with Upper. Optimize routes effortlessly and start your free trial now to boost delivery efficiency!

upper - Wiktionary, the free dictionary It is said in Tibetan culture, in order to understand the upper, it is necessary to understand the lower first. Once, the lower is understood, the upper is just an introductory

Upper - definition of upper by The Free Dictionary Define upper. upper synonyms, upper pronunciation, upper translation, English dictionary definition of upper. adj. 1. Higher in place, position, or rank: the upper bunk; the upper half of

UPPER Definition & Meaning - Merriam-Webster The meaning of UPPER is higher in physical position, rank, or order. How to use upper in a sentence

UPPER | definition in the Cambridge English Dictionary Idiom be on your uppers (Definition of upper from the Cambridge Advanced Learner's Dictionary & Thesaurus © Cambridge University Press)

Python String upper () Method - W3Schools Definition and Usage The upper() method returns a string where all characters are in upper case. Symbols and Numbers are ignored

Convert Case - Convert upper case to lower case, lower case to upper The capitalized case converter will automatically convert the starting letter of every word into an upper case and will leave the remaining letters as lower case ones

UPPER definition and meaning | Collins English Dictionary The upper of a shoe is the top part of it, which is attached to the sole and the heel. Wear well-fitting, lace-up shoes with soft uppers. Leather uppers allow the feet to breathe

UPPER Synonyms: 79 Similar and Opposite Words - Merriam-Webster Synonyms for UPPER: higher, uppermost, highest, loftier, topmost, top, loftiest, maximum; Antonyms of UPPER: lowest, lower, lowermost, underneath, under, below, nether, bottommost

UPPPER Official Store | Premium Fitness Gear – UPPPER Gear From building a powerful chest to sculpting your back and shoulders, these upper body machines are your ultimate tools for fast, effective muscle growth and strength

Best Route Planning Software – Take Upper's Free Trial Now! Discover the best route planning

software with Upper. Optimize routes effortlessly and start your free trial now to boost delivery efficiency!

upper - Wiktionary, the free dictionary It is said in Tibetan culture, in order to understand the upper, it is necessary to understand the lower first. Once, the lower is understood, the upper is just an introductory

Upper - definition of upper by The Free Dictionary Define upper. upper synonyms, upper pronunciation, upper translation, English dictionary definition of upper. adj. 1. Higher in place, position, or rank: the upper bunk; the upper half of

Back to Home: https://ns2.kelisto.es