## vascular anatomy of head and neck

vascular anatomy of head and neck plays a crucial role in understanding the complex blood supply and drainage of these vital regions. The head and neck contain a rich network of arteries, veins, and associated structures that provide oxygen and nutrients to various tissues while also facilitating the removal of waste products. This article delves into the vascular anatomy of the head and neck, exploring the key arteries and veins, their anatomical pathways, and their clinical significance. We will investigate the major vessels involved, including the carotid arteries, vertebral arteries, and major venous systems, as well as their relationships with surrounding structures. Additionally, we will discuss common disorders related to the vascular anatomy of this region and their implications for health and disease.

- Introduction to Vascular Anatomy
- Major Arteries of the Head and Neck
- Venous Drainage of the Head and Neck
- Clinical Significance of Vascular Anatomy
- Common Disorders Related to Vascular Anatomy
- Conclusion

### **Introduction to Vascular Anatomy**

The vascular anatomy of the head and neck encompasses a complex arrangement of blood vessels that supply and drain the tissues within these regions. Understanding this anatomy is essential for healthcare professionals, particularly those in the fields of surgery, radiology, and emergency medicine. The primary arteries supplying the head and neck include the common carotid arteries, which bifurcate into the internal and external carotid arteries, and the vertebral arteries. These arteries provide vital oxygenated blood to the brain, face, neck, and other structures.

In addition to arteries, the venous drainage system is equally important, as it is responsible for returning deoxygenated blood back to the heart. The internal jugular vein, external jugular vein, and various smaller veins contribute to this process. Knowledge of the vascular anatomy is critical not only for surgical procedures but also for diagnosing and managing vascular-related conditions such as strokes, aneurysms, and trauma.

## **Major Arteries of the Head and Neck**

The major arteries of the head and neck can be categorized into several key vessels, which supply blood to specific regions. Understanding their pathways and branches is essential for comprehending the vascular supply of the head and neck.

#### **Common Carotid Artery**

The common carotid artery (CCA) originates from the aorta on the left side and from the brachiocephalic trunk on the right side. It ascends the neck and typically bifurcates at the level of the fourth cervical vertebra into the internal and external carotid arteries.

#### **Internal Carotid Artery**

The internal carotid artery (ICA) is responsible for supplying blood to the brain, eyes, and forehead. It enters the skull through the carotid canal and gives rise to several branches, including:

- Ophthalmic artery
- Anterior cerebral artery
- Middle cerebral artery

These branches are critical for maintaining cerebral perfusion and function.

#### **External Carotid Artery**

The external carotid artery (ECA) supplies blood to the face and neck. It has several important branches, which include:

- Superior thyroid artery
- Lingual artery
- Facial artery
- Occipital artery
- · Maxillary artery
- Superficial temporal artery

These branches provide essential blood supply to the facial structures, muscles, and glands.

#### **Vertebral Arteries**

The vertebral arteries arise from the subclavian arteries and ascend through the transverse foramina of the cervical vertebrae. They contribute to the posterior circulation of the brain by merging to form the basilar artery, which supplies the brainstem and cerebellum.

### **Venous Drainage of the Head and Neck**

Venous drainage in the head and neck is complex, involving several major veins that collect blood from various regions. The primary veins include the internal jugular vein, external jugular vein, and vertebral veins.

#### **Internal Jugular Vein**

The internal jugular vein (IJV) is the main venous return pathway from the brain. It begins at the base of the skull and descends alongside the carotid arteries. The IJV collects blood from several important structures through its tributaries, including:

- Facial vein
- · Lingual vein
- Pharyngeal veins
- · Occipital vein
- · Thyroid veins

This vein plays a crucial role in draining deoxygenated blood from the head and neck back to the heart.

### **External Jugular Vein**

The external jugular vein (EJV) drains blood from the superficial structures of the head and neck, including the face and scalp. It runs superficially and typically empties into the subclavian vein.

#### **Vertebral Veins**

The vertebral veins accompany the vertebral arteries and drain the cervical spinal cord and vertebral column. They communicate with the internal jugular vein and contribute to the venous drainage of the head and neck.

### **Clinical Significance of Vascular Anatomy**

Understanding the vascular anatomy of the head and neck is vital for diagnosing and treating various medical conditions. Knowledge of the anatomical relationships of arteries and veins can aid in surgical planning and intervention.

#### Stroke and Ischemia

Strokes can occur due to blockages or ruptures in the arteries supplying the brain. Recognizing the vascular pathways can help in identifying areas at risk and in the management of acute strokes.

#### **Trauma and Hemorrhage**

In cases of head and neck trauma, understanding the vascular anatomy is essential for preventing and managing hemorrhage. Surgeons must be aware of the location of major arteries and veins to minimize complications.

#### **Vascular Surgery**

Surgeons specializing in vascular procedures often work within the head and neck region. Knowledge of the vascular anatomy is critical for performing procedures such as carotid endarterectomy or management of aneurysms.

## **Common Disorders Related to Vascular Anatomy**

Various disorders can affect the vascular structures of the head and neck, leading to significant health implications. Some of these include:

#### **Atherosclerosis**

Atherosclerosis can lead to narrowing of the carotid arteries, increasing the risk of stroke. Regular monitoring of carotid artery health is important for at-risk populations.

#### **Carotid Artery Dissection**

Carotid artery dissection can cause severe headaches and neurological symptoms. Understanding the anatomy and vascular flow is critical for timely diagnosis and management.

#### **Venous Thrombosis**

Venous thrombosis, particularly in the internal jugular vein, can lead to complications such as jugular vein thrombosis and may require surgical intervention.

#### **Conclusion**

The vascular anatomy of the head and neck is intricate and vital for sustaining life and function in these regions. Through understanding the major arteries and veins, as well as their clinical

significance, healthcare professionals can provide better care and management for patients. This comprehensive overview highlights the importance of vascular anatomy in both physiological and pathological contexts, reinforcing the need for continual education in this essential area of human anatomy.

## Q: What are the primary arteries supplying blood to the head and neck?

A: The primary arteries supplying blood to the head and neck include the common carotid arteries, which bifurcate into the internal carotid arteries (supplying the brain) and external carotid arteries (supplying the face and neck), as well as the vertebral arteries.

# Q: How does the internal jugular vein contribute to venous drainage?

A: The internal jugular vein is the main venous pathway that drains deoxygenated blood from the brain, face, and neck back to the heart, receiving blood from various tributaries such as the facial vein and thyroid veins.

# Q: What is the significance of understanding vascular anatomy in surgery?

A: Understanding vascular anatomy is crucial in surgery to avoid damaging major arteries and veins during procedures, to manage potential complications, and to ensure effective surgical outcomes.

# Q: What are some common disorders associated with vascular anatomy in the head and neck?

A: Common disorders include atherosclerosis, carotid artery dissection, and venous thrombosis, which can lead to serious complications such as stroke or hemorrhage if not properly managed.

### Q: How do carotid arteries contribute to brain health?

A: The carotid arteries provide essential blood supply to the brain, delivering oxygen and nutrients necessary for maintaining brain function and overall neurological health.

## Q: What role do vertebral arteries play in the vascular system of the head and neck?

A: The vertebral arteries contribute to the posterior circulation of the brain, supplying blood to critical areas such as the brainstem and cerebellum, which are vital for coordination and basic life functions.

# Q: Why is knowledge of vascular anatomy important for diagnosing strokes?

A: Knowledge of vascular anatomy helps healthcare professionals identify blockages or ruptures in the arteries supplying the brain, facilitating timely diagnosis and intervention to minimize damage during a stroke.

#### Q: What are the risks associated with carotid artery disease?

A: Carotid artery disease increases the risk of stroke due to the potential for plaque buildup leading to narrowing or blockage of blood flow, necessitating careful monitoring and management.

# Q: Can trauma to the head and neck affect vascular structures?

A: Yes, trauma to the head and neck can damage vascular structures, leading to hemorrhage and requiring immediate medical intervention to control bleeding and restore vascular integrity.

### **Vascular Anatomy Of Head And Neck**

Find other PDF articles:

https://explore.gcts.edu/gacor1-22/Book?dataid=etu79-6951&title=one-of-us-is-lying-tv-show.pdf

vascular anatomy of head and neck: Evidence-Based Management of Head and Neck Vascular Anomalies Jonathan A. Perkins, Karthik Balakrishnan, 2018-10-15 This text addresses vascular anomalies and the management of these diverse and clinically challenging set of conditions which have significant impact on patient function, quality of life and, in certain cases, survival. The text covers each category and type of vascular anomaly and the unique diagnostic and therapeutic challenges they pose. The chapters will also include fundamental scientific literature pertaining to each specific condition to help clinicians and clinical researchers better assess and manage vascular anomalies of the head and neck. Each vascular condition will be supported with medical photographs and radiographic images, summaries of diagnostic and therapeutic options, a list of syndromes and genetic mutations known to be associated with each anomaly, case studies, and clinical and research pearls from national and international leaders in the field. Management of Head and Neck Vascular Anomalies: Evidenced-based Assessment will be an invaluable resource for otolaryngologists, plastic surgeons, general and general pediatric surgeons, orthopaedic surgeons, dermatologists, interventional radiologists, residents and fellows in these fields, and researchers with interest in vascular anomalies of the head and neck.

vascular anatomy of head and neck: Mimics, Pearls and Pitfalls of Head & Neck Imaging, An Issue of Neuroimaging Clinics of North America, E-Book Gul Moonis, Daniel T. Ginat, 2022-05-10 In this issue of Neuroimaging Clinics, guest editors Drs. Gul Moonis and Daniel T. Ginat bring their considerable expertise to the topic of Mimics, Pearls, and Pitfalls of Head & Neck Imaging. Top

experts in the field cover key topics such as implants and foreign bodies in head and neck imaging; FDG-PET artifacts in the head and neck region; pearls, pitfalls, and mimics in pediatric head and neck imaging; and more. - Contains 12 relevant, practice-oriented topics including computed tomography artifacts in the head and neck region; magnetic resonance imaging artifacts in the head and neck region; mimics in temporal bone imaging; and post-surgical and post-radiation findings in head and neck imaging; and more. - Provides in-depth clinical reviews on mimics, pearls, and pitfalls of head and neck imaging, offering actionable insights for clinical practice. - Presents the latest information on this timely, focused topic under the leadership of experienced editors in the field. Authors synthesize and distill the latest research and practice guidelines to create clinically significant, topic-based reviews.

vascular anatomy of head and neck: Vascular Challenges in Skull Base Surgery Paul Gardner, Carl Snyderman, Brian Jankowitz, 2021-11-17 The essential multidisciplinary guide for the prevention and management of vascular injury from master skull base surgeons Vascular injury is the most significant source of morbidity or mortality during skull base surgery, regardless of the surgical approach. While skull base approaches always placed arteries and veins at risk, newer endoscopic endonasal approaches have introduced new challenges for the prevention and management of vascular injury. Greater anatomic knowledge, additional surgical options, improved instrumentation, advances in interventional neuroradiology, and enhanced training all contribute to successful outcomes. Vascular Challenges in Skull Base Surgery by renowned skull base experts Paul Gardner, Carl Snyderman, Brian Jankowitz, and distinguished contributors, fills a gap in the literature, with invaluable guidance on managing rare but potentially catastrophic surgical complications. The full range of surgical approaches to the anterior, middle, and posterior cranial fossae are covered in 22 chapters. Diverse topics encompass open and endoscopic endonasal surgical approaches, endovascular techniques including balloon test occlusion and embolization, and standard and alternative bypass procedures. The last three chapters discuss venous considerations, neurophysiologic monitoring, and the role of training and simulation in vascular injury prevention. Key learning points, illustrated discussion of relevant anatomy, and tips and tricks are targeted at helping skull base surgeons leverage practical strategies to improve patient outcomes. Key Highlights An impressive group of expert, highly-experienced surgeons share firsthand knowledge Insightful analyses of root causes and clinical pearls provide indispensable prevention tactics High-quality images and videos enhance visual understanding of surgical anatomy and techniques Trainees and practicing skull base surgeons will greatly benefit from the collective knowledge and evidence-based injury avoidance strategies shared by authors who have learned to master the art of skull base surgery.

vascular anatomy of head and neck: Problem Solving in Cardiovascular Imaging Suhny Abbara, MD, FACR, FSCCT, Sanjeeva P Kalva, MD, 2012-12-11 Optimize diagnostic accuracy with Cardiovascular Imaging, a title in the popular Problem Solving in Radiology series. Drs. Suhny Abbara and Sanjeeva Kalva use a problem-based approach to help you make optimal use of the latest cardiovascular imaging techniques and achieve confident diagnoses. Make the most effective use of today's imaging techniques, including PET and SPECT. Perform effective interventions using the newest grafts, stents, and coils. See conditions as they appear in practice with more than 2,350 images detailing anatomy, normal anatomic variants, and pathology. Make optimal clinical choices and avoid complications with expert protocols and tricks of the trade. Avoid common problems that can lead to an incorrect diagnosis. Tables and boxes with tips, pitfalls, and other teaching points show you what to look for, while problem-solving advice helps you make sound clinical decisions. Quickly find the information you need thanks to a well-organized, user-friendly format with consistent headings, detailed illustrations, and at-a-glance tables. Access the entire text and illustrations online at www.expertconsult.com.

vascular anatomy of head and neck: Cunningham's Manual of Practical Anatomy: Head and neck Daniel John Cunningham, 1927

vascular anatomy of head and neck: Manual of Practical Anatomy: Head and neck Daniel

John Cunningham, 1921

**vascular anatomy of head and neck:** <u>Maintenance Manual for Lifelong Learning Jonas T.</u> Johnson, 2002-05

vascular anatomy of head and neck: Neurointerventional Management Robert W. Hurst, Robert H. Rosenwasser, 2012-04-18 Crossing the boundaries of classically delineated medical and surgical specialties including neurosurgery, neuroradiology, and neurology, Interventional Neuroradiology uses advanced neuroimaging combined with endovascular techniques to guide catheters and devices through blood vessels to treat disease involving structures of the head, neck, and cen

vascular anatomy of head and neck: Otolaryngology and Head and Neck Surgery , 1993
vascular anatomy of head and neck: Pearce's Surgical Companion Oliver Pearce,,
2009-05-01 This book represents a review of all the subjects with which a junior doctor needs to be
effortlessly conversant in their postgraduate surgical exams in order to qualify as a specialist
trainee. It covers a full range of subjects, concisely written to aid the revision process and includes
basic science, physiology, anatomy, examination techniques, operative surgery and clinical surgery
topics. The latter two sections are further subdivided into their relevant surgical specialty for clarity
and ease of learning: general surgery, orthopaedics, vascular surgery, ENT surgery, breast and
endocrine surgery, and urology. The physiology section is further subdivided into the following
areas: respiratory, cardiac, renal, gastrointestinal, endocrine, and general. The purpose of this book
is to pull together the main subject areas to provide a coherent overview of the facts, as well as the
principles, which examiners are looking for when deciding whether a doctor has the requisite skills
and knowledge to proceed further with their training in surgery as a specialist. It contains essential
required information, which would otherwise take months to gather by reading a variety of
textbooks, each one specifically aimed at its own specialist topic.

vascular anatomy of head and neck: *Imaging of the Brain* Thomas P. Naidich, MD, Mauricio Castillo, MD, Soonmee Cha, MD, James G. Smirniotopoulos, MD, 2012-10-31 Imaging of the Brain provides the advanced expertise you need to overcome the toughest diagnostic challenges in neuroradiology. Combining the rich visual guidance of an atlas with the comprehensive, in-depth coverage of a definitive reference, this significant new work in the Expert Radiology series covers every aspect of brain imaging, equipping you to make optimal use of the latest diagnostic modalities. Compare your clinical findings to more than 2,800 digital-quality images of both radiographic images and cutting edge modalities such as MR, multislice CT, ultrasonography, and nuclear medicine, including PET and PET/CT. Visualize relevant anatomy more easily thanks to full-color anatomic views throughout. Choose the most effective diagnostic options, with an emphasis on cost-effective imaging. Apply the expertise of a diverse group of world authorities from around the globe on imaging of the brain. Use this reference alongside Dr. Naidich's Imaging of the Spine for complementary coverage of all aspects of neuroimaging. Access the complete contents of Imaging of the Brain online and download all the images at www.expertconsult.com.

vascular anatomy of head and neck: Tinnitus: Imaging, Endovascular and Surgical Approaches, An issue of Neuroimaging Clinics of North America Prashant Raghavan, Dheeraj Gandhi, 2016-07-27 This issue of Neuroimaging Clinics of North America focuses on Imaging of Tinnitus. Articles will include: Neuroscience of Tinnitus; Clinical Evaluation of the Patient with Tinnitus; Arterial Abnormalities Leading to Tinnitus; Paragangliomas and Other Vascular Skull Base Tumors; Dural AV Fistulae: Imaging and Management; Venous Abnormalities Leading to Tinnitus: Imaging Evaluation; Endovascular Intervention in Venous Tinnitus: New Horizons and Future Directions; Emerging Role of Surgical Treatments in the Treatment of Tinnitus; Role of Advanced Neuroimaging and Future Directions; Imaging Interpretation of Temporal Bone Studies in a Patient with Tinnitus: A Systematic Approach; and much more!

vascular anatomy of head and neck: Sataloff's Comprehensive Textbook of Otolaryngology: Head & Neck Surgery Robert T Sataloff, Anil K Lalwani, Marvin P. Fried, Abtin Tabaee, Michael S. Benninger, Christopher J. Hartnick, 2015-11-30 Sataloffs Comprehensive

Textbook of Otolaryngology (Six Volume Set) is a multi-volume textbook covering basic and clinical science across the entire field of otolaryngology. Volumes in the set include; otology, neurotology and skull-based surgery; rhinology, allergy and immunology; facial plastic and reconstructive surgery; laryngology; head and neck surgery; and paediatric otolaryngology. The full set is enhanced by over 5000 full colour images and illustrations, spanning nearly 6000 pages, complete with a comprehensive index on DVD. Edited by Robert T Sataloff from Drexel University College of Medicine, Philadelphia, each volume includes contributions from internationally recognised experts in otolaryngology, ensuring authoritative content throughout. Sataloffs Comprehensive Textbook of Otolaryngology (Six Volume Set) is an indispensable, in-depth guide to the field for all otolaryngology practitioners.

vascular anatomy of head and neck: Advanced Aesthetic Rhinoplasty Melvin A. Shiffman, Alberto Di Giuseppe, 2013-04-19 Aesthetic rhinoplasty is among the most common aesthetic operations in the field of facial aesthetic plastic surgery, but it is also viewed as one of the most complex. This comprehensive book provides a wealth of up-to-date information on advanced aesthetic rhinoplasty techniques. After discussion of anatomy, psychological issues, and preoperative planning, a wide range of primary and secondary rhinoplasty techniques are described clearly and in detail with the aid of numerous high-quality color illustrations. The use of fillers in rhinoplasty, ethnic variations in anatomy and techniques, and possible risks and complications are all clearly explained. This book is intended primarily for experienced surgeons in the fields of plastic surgery, cosmetic surgery, general surgery, otolaryngology, ophthalmology, oral maxillofacial surgery, and cosmetic surgical subspecialties. It will also be an invaluable resource for residents and fellows.

vascular anatomy of head and neck: Multi-Detector CT Imaging Handbook, Two Volume Set Luca Saba, Jasjit S. Suri, 2022-05-29 This two volume set covers the engineering and clinical benefits in diagnosis of human pathologies, including the protocols and potential of advanced tomography scanning with very high quality CT images. With contributions from world-class experts, the book examines all aspects of CT technologies related to neck-brain, cardiovascular systems, thorax, abdomen and GI system, pelvis and urinary system, and musculoskeletal system. It also provides coverage of CAD applications to CT along with a discussion of the potential dangers of CT in terms of over-radiation, particularly related to children.

vascular anatomy of head and neck: Surgical Pathology of the Head and Neck, Second Edition, Leon Barnes, 2000-11-29 Updated, reorganized, and revised throughout, this highly lauded three-volume reference provides an interdisciplinary approach to the diagnosis, treatment, and management of head and neck diseases, including the incidence, etiology, clinical presentation, pathology, differential diagnosis, and prognosis for each disorder-promoting clear communication between pathologists and surgeons. Written by more than 30 internationally distinguished physicians, Surgical Pathology of the Head and Neck, Second Edition now contains: over 1045 photographs, micrographs, drawings, and tables-nearly 200 more illustrations than the first edition five new chapters on molecular biology, fine-needle aspiration, vesiculobullous diseases, neck dissections, and radiation a cumulative and expanded index in each volume Unparalleled in scope and content by any other book available on the subject, Surgical Pathology of the Head and Neck, Second Edition is a must-have resource for oral, surgical, and general pathologists; otolaryngologists; oral, maxillofacial, plastic and reconstructive, general, head and neck, and orthopedic surgeons and neurosurgeons; oncologists; hematologists; ophthalmologists; radiologists; endocrinologists; dermatologists; dentists; and residents and fellows in these disciplines.

vascular anatomy of head and neck: Cumulated Index Medicus, 1996 vascular anatomy of head and neck: Aortic Coarctation: Unraveling Pathways, Bridging Gaps, and Shaping the Future of Cardiovascular Care Dr. Spineanu Eugenia, 2024-10-10 Dive into the intricate world of cardiovascular medicine with our treatise, 'Aortic Coarctation: Unraveling Pathways, Bridging Gaps, and Shaping the Future of Cardiovascular Care.' This comprehensive exploration takes you on a journey through the historical, anatomical, genetic, and clinical dimensions of aortic coarctation, a congenital anomaly with far-reaching implications for

cardiovascular health. Beginning with a meticulous definition and overview, we navigate the historical perspectives that have shaped our understanding of this condition. From incidence and prevalence to the detailed anatomy of the aorta, each chapter unfurls layers of knowledge, offering a holistic perspective that extends from the molecular and genetic aspects to the broader impact on systemic health. Delving into the aortic wall structure, blood supply intricacies, and the dynamic hemodynamics of aortic flow, we provide a foundation for comprehending the complexities of this condition. Genetic predispositions and fetal developmental aspects, as well as acquired factors such as inflammatory processes and traumatic causes, are explored in depth, highlighting the multifaceted nature of aortic coarctation.

vascular anatomy of head and neck: Extracranial Carotid and Vertebral Artery Disease
Sachinder Singh Hans, Mohammed F. Rehman, 2025-03-11 Acute stroke care has improved
significantly during the last 10-20 years, starting with IV TPA to transfemoral carotid stenting, TCAR
and large vessel thrombectomy. Large vessel thrombectomy is performed in more stroke cases
within a few hours of stroke to salvage the brain tissue from the effect of acute ischemia. This text is
designed to be a comprehensive and state-of-the art approach to managing straightforward to
complex arterial reconstructions. In the second edition of this book, chapters from the first edition
have been revised and updated with contributions from new authors, and a number of new chapters
for management of stroke have been added. Each chapter dealing with clinical pathology addresses
patient selection, preoperative considerations, technical steps for operation and emphasis on
avoiding complications. Management of common complications related to each procedure is outlined
in a step-wise fashion. Pertinent case material is presented in brief at the end of the chapters, and
plentiful figures, illustrations and review questions help the reader in grasping the technique of a
particular procedure.

vascular anatomy of head and neck: *Grabb's Encyclopedia of Flaps* Berish Strauch, Luis O. Vasconez, M.d., Elizabeth J. Hall-Findlay, Bernard T. Lee, 2009 Now in its thoroughly updated Third Edition, this classic work is the most comprehensive reference ever published on surgical flaps for reconstructing defects in the head and neck. In clearly organized chapters, internationally recognized surgeons describe and illustrate every clinically proven flap option available for repairing every routine and unusual defect. Complementing the text are hundreds of clinical photographs and diagrams of anatomy, blood supply, flap design, and operative procedures. The book is extensively indexed and organized by anatomic region, and chapters follow a uniform format that clearly presents all the information needed on each flap. The Third Edition features new chapters by the original experts who have made landmark contributions to the recent literature. Many chapters from the previous edition have been completely revised. Wherever appropriate, the editors have added editorial comments to guide the reader in selection of flaps.

### Related to vascular anatomy of head and neck

**Log In to Your Docusign Account** 3 days ago Enter the email address for your account and select NEXT. Enter your account password and select Log in

**How can we help? - DocuSign Support Center** Developer Center Trust Portal Learning Docusign University Trust Center More Support Plans

**How do I sign a Docusign document?** Learn how to sign a Docusign document after receiving an email requesting your signature

**How do I access a signed Docusign document?** Accessing a Docusign document after it was signed is easy to do. In some cases, your documents might be attached to the Completed email. I was the sender If you sent the

**DocuSign Support Center** DocuSign's help and support portal dedicated to customer success with Digital Transaction Management

**Docusign eSignature** Get started with Docusign eSignature. Docusign eSignature is the #1 way to send and sign documents. Make your business faster, simpler and more cost-efficient with electronic

**Two-Step Verification - DocuSign Support Center** Most Docusign apps, including our mobile apps and integrations like Docusign for SharePoint, support two-step verification. For more information about two-step verification,

**System Requirements for Signing - DocuSign Support Center** Review these minimum signing system requirements. These include signing online, signing with mobile devices, signing with assistive technologies, and Docusign Notary

**How to Send an Envelope - DocuSign Support Center** Learn how to send an envelope with Docusign, including uploading documents, adding recipients, defining the workflow, customizing messaging and using standard recipient

**Change Signing Responsibility - DocuSign Support Center** Enter the new signer's email address, name, and a reason for changing the signing responsibility. When you're finished, select ASSIGN TO SOMEONE ELSE. All the fields

 ${f D}$ 

http:// localhost. htm\_

Back to Home: <a href="https://explore.gcts.edu">https://explore.gcts.edu</a>