



An Observational Study to Find out the Available Youtube Neonatal Radiology Videos

KEYWORDS

YouTube videos, Neonatal, Radiology, Ultrasonography, CT scan, MRI

Dr Shashi Girish Gupta

Dept of Radiology, SGRRIMHS, Dehradun, India -248001

Dr Girish Gupta

Dept of Pediatrics, SGRRIMHS, Dehradun, India

Dr SK Rana

Dept of Pediatrics SGRRIMHS, Dehradun, India

ABSTRACT

The observational study was conducted to find out the available YouTube Radiology videos on google search. The search was conducted using key phrases YouTube videos Neonatal Radiology, YouTube videos Neonatal Ultrasonography, YouTube videos Neonatal CT scan and YouTube videos Neonatal MRI. The videos were analyzed for the availability, relevance and area addressed. Limited availability of videos in CT scan and MRI reflected necessity of development of relevant teaching & training videos in these domains.

Introduction:

There is rapid technological advancement and professional interest in the Smart phone based Apps in the field of Medicine.^{1,2,3,4,5} The best training occurs either by directly observing the procedure and image or by using training videos. YouTube videos (YTV) are very often observed in various fields of Medicine.⁶ However, in the field of Neonatology use of YTV becomes all the more important so as to practice safe & effective medicine. Therefore, the present observational study was designed to address the research question of the current status of YTV in the field of Neonatal Imaging and thus firstly optimally utilise them and develop videos in the deficient domains.

Aim:

An observational study to find out the available YouTube Neonatal Radiology videos.

Material & Methods:

The google search was conducted using key phrases YouTube videos Neonatal Radiology, YouTube videos Neonatal Ultrasonography, YouTube videos Neonatal CT scan and YouTube videos Neonatal MRI. The videos were analyzed for the availability, relevance and area addressed.

Observations:

The YTV detailed data on google search is depicted in Table no. 1. The details of some relevant specific YTV are shown in Table no 2.

Discussion:

The study revealed that the total number of relevant YTV being 27 out of more than half a million search results. YTV have mainly addressed to Brain, Chest, Hip and others. It is presumed that appropriate utilization of available YTV will greatly facilitate neonatal care and training. Scarcity of YTV in the domains of Neonatal CT & MRI is alarming and warrants attention.

Conclusions:

This observational study found out the available YTV in the field of Neonatal Imaging. The number of YTV available are too few for such a specialized field of Neonatal Imaging. It is thus imperative that more videos are developed in near future addressing the various domains of this subspecialty.

Table 1: YTV on Neonatal Imaging as on 30 Nov 2015 on google search

Key Phrase	No. of YTV	No. Relevant YTV				
			Brain	Hip	Chest	Misc.
YTV Neonatal Radiology	120000	12	2	-	9	1
YTV Neonatal Ultrasonography	367000	11	8	3	-	-
YTV Neonatal CT Scan	41400	1	1			
YTV Neonatal MRI	121000	3	3	-		-

Table 2: Specific examples of some relevant YTV with details

S.N.	Name	Source	Place/ Site	Year	Subject	Time (min)
1	Radiography of the Neonatal Chest	Dr. George S. Bisset	Texas Children's Hospital	2011	Neonatal Chest diseases	55

2	LearningRadiology 18(Neonatal Lung Disease)	learnin-gradiology.com	Albert Einstein Medical Centre, Philadelphia	2010	Neonatal Chest diseases	15
3	Neonatal Radiography part 1	Radiology Residency UM/ JMH	University of Miami	2015	Normal Findings and the Basics	12
4	Neonatal Radiography part 2	Radiology Residency UM/ JMH	University of Miami	2015	Medical causes of Neonatal Respiratory Distress	18.22
5	Neonatal Radiography part 3	Radiology Residency UM/ JMH	University of Miami	2015	Surgical Lesions causing Neonatal Respiratory Distress.	15.12
6	Neonatal Radiography part 4	Radiology Residency UM/ JMH	University of Miami	2015	Misplaced Lines and Tubes	14.55
7	Neonatal Radiography part 5	Radiology Residency UM/ JMH	University of Miami	2015	Barotrauma and Extra Alveolar Air	27.12
8	NICU Radiology Casebook	Tanzeema Hossain	NICU-trainee-portal	2014	Respiratory distress in 31 week twin	9.28
9	Neonatal Brain MR Imaging	KOC Radiology	Hospital for Sick Kids, Canada	2014	Basics of MRI neonatal brain	34.18

REFERENCE

1. Gupta SG, Gupta G. Pediatric Radiology Apps & their relevance in Medical practice & training IJSR 2015 Oct;4 (10),441-42. | 2. Richardson ML. Software Aids for radiologists: Part 2, Essential apps for handheld devices. AJR Am J Roentgenol. 2012 Dec;199(6):W714-22 | 3. Székely A, Talanow R, Bágyi P. Smartphones, tablets and mobile applications for radiology. Eur J Radiol. 2013 May;82(5):829-36. | 4. Sharpe EE 3rd, Kendrick M, Strickland C, Dodd GD 3rd. The Radiology Resident iPad Toolbox: an educational and clinical tool for radiology residents. J Am Coll Radiol. 2013 Jul;10(7):527-32. | 5. Gupta G. Are Medical Apps the future of Medicine? MJAFI 2013 April;69(2):105-106 | 6. Kwon JY, Chacko AT, Kadzielski JJ, Appleton PT, Rodriguez EK. A novel methodology for the study of injury mechanism: ankle fracture analysis using injury videos posted on YouTube.com. J Orthop Trauma. 2010 Aug;24(8):477-82 |