Vol. 99 No. 2 February 2005

Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontology

ORAL AND MAXILLOFACIAL PATHOLOGY Editor: Alan R. Gould

Odontogenic tumors: A review of 319 cases in a Nigerian teaching hospital

Akinola Ladipo Ladeinde, BDS, FMCDS, FWACS,[a] Oluseyi Folake Ajayi, BDS, FMCDS,[b] Mobolanle Olugbemiga Ogunlewe, BDS, FWACS,[c] Wasiu Lanre Adeyemo, BDS, FMCDS,[d] Godwin Toyin Arotiba, BDS, FMCDS, FWACS, FDSRCS,[e] Babatunde Olamide Bamgbose, BDS, FMCDS,[f] and Jelili Adisa Akinwande, BDS, FMCDS, FWACS,[g] Lagos, Nigeria
UNIVERSITY OF LAGOS COLLEGE OF MEDICINE AND LAGOS UNIVERSITY TEACHING HOSPITAL

Objective. This study sought to determine the relative frequency of odontogenic tumors in a Nigerian population and to compare these data with previous reports.
Study design. Records of patients seen at the Lagos University Teaching Hospital between January 1980 and December 2003, with histologic diagnosis of odontogenic tumors (based on World Health Organisation classification, 1992), were analyzed.
Results. Odontogenic tumors constituted 9.6% of all the biopsies of oral and jaw lesions seen within the period under study. Three hundred and eight (96.6%) were intraosseous, and 11 (3.4%) were peripheral (peripheral odontogenic fibroma = 7; peripheral myxoma = 3; peripheral ameloblastoma = 1). The mean age of patients was 29.9 ± 15.6 years (range, 4-85 years). Among these cases, 96.6% of the tumors were benign and 3.4% were malignant. Ameloblastoma with predilection for the mandible was the most frequent odontogenic tumor (63%), followed by adenomatoid odontogenic tumor (AOT) (7.5%), myxoma (6.5%), calcifying epithelial odontogenic cyst (5.3%), and odontogenic fibroma (5.3%). More cases of malignant odontogenic tumors were seen than cases of calcifying epithelial odontogenic tumor and odontomas. The mean ages of patients with AOT, ameloblastic fibroma, and odontoma were significantly lower than those with ameloblastoma ($P < .05$). No significant difference was found between the mean ages of patients with benign odontogenic tumors and those with malignant odontogenic tumors ($P = .058$).
Conclusions. Odontogenic tumors, especially ameloblastoma, are not considered rare among Nigerians, whereas odontoma, regarded as the most frequent odontogenic tumor in North and South America, is rare.
(Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2005;99:191-5)

Odontogenic tumors (OT) are a group of heterogenous lesions derived from epithelial and/or mesenchymal elements that are part of the tooth-forming apparatus.[1] They range from hamartomatous or nonneoplastic tissue proliferations to malignant neoplasms with metastatic capacity.[2] A review of the literature revealed that odontogenic tumors accounted for between 1.0% and 30.0% of oral lesions.[3-5]

The first major attempt to classify this group of lesions was published in 1971 after a 5-year collaborative effort, organized by the World Health Organization (WHO).[6] An updated second edition of the WHO classification was published in 1992.[7] Due to advances in immunohistochemistry and molecular biology during the last decade, a revision of the 1992 edition of the WHO classification has been proposed by Philipsen and Reichart.[2]

Available literature on the relative frequency of OT are mostly in non-Africans.[3,8-14] However, a few reports[4,5,15,16] can be found in the international literature on the prevalence of odontogenic tumors in African

[a]Senior Lecturer, Department of Oral and Maxillofacial Surgery, University of Lagos College of Medicine.
[b]Lecturer, Department of Oral Pathology and Biology, University of Lagos College of Medicine.
[c]Senior Lecturer, Department of Oral and Maxillofacial Surgery, University of Lagos College of Medicine.
[d]Senior Registrar, Lagos University Teaching Hospital, Lagos, Nigeria.
[e]Senior Lecturer, Department of Oral and Maxillofacial Surgery, University of Lagos College of Medicine.
[f]Senior Registrar, Lagos University Teaching Hospital, Lagos, Nigeria.
[g]Professor, Department of Oral and Maxillofacial Surgery, University of Lagos College of Medicine.
Received for publication May 28, 2004; returned for revision Jul 28, 2004; accepted for publication Aug 9, 2004.
1079-2104/$ - see front matter

doi:10.1016/j.tripleo.2004.08.031

populations. The aim of this study was to determine the relative frequency of this heterogenous group of lesions seen at the Lagos University Teaching Hospital, Nigeria, over a period of 24 years (1980-2003), and to compare these data with previous reports.

MATERIAL AND METHODS

The histopathology records of the Department of Oral and Maxillofacial Surgery and the Department of Oral Pathology and Biology of the Lagos University Teaching Hospital were reviewed retrospectively for all the lesions of the oral cavity and the jaws seen from January 1980 to December 2003. A total of 339 lesions classified as odontogenic tumors during the period were reviewed. One investigator re-evaluated the hematoxylin and eosin−stained sections, and the diagnosis in each case was confirmed or modified in accordance with the second edition of the WHO classification. These were analyzed for age, gender, site of tumor, and histopathologic typing. For ease of reference, odontogenic tumors were divided into 2 major groups based on WHO classification: benign (group 1) and malignant (group 2) groups, with the benign group further subdivided into 1a (odontogenic epithelium without odontogenic ectomesenchyme), 1b (odontogenic epithelium with odontogenic ectomesenchyme, with or without dental hard tissue formation), and 1c (odontogenic ectomesenchyme with or without included odontogenic epithelium).

Data was analyzed using the SPSS for Windows (version 11.5; SPSS, Chicago, Ill) statistical software package. Descriptive statistics and test of significance were used as appropriate. The critical level of significance was set at $P < .05$.

RESULTS

A total of 3,337 lesions of the oral cavity and the jaws were seen and diagnosed between January 1980 and December 2003. Of these, 319 (9.6%) satisfied the criteria to be included as odontogenic tumors. Three hundred and eight (96.6%) were intraosseous, and 11 (3.4%) were peripheral (peripheral odontogenic fibroma = 7; peripheral myxoma = 3; peripheral ameloblastoma = 1). The mean age of patients was 29.9 ± 15.6 years (range, 4-85 years). Odontogenic tumors were most frequent in the second to fifth decade, 88.1% of patients being between 11 and 50 years (Table I). There was an overall male to female ratio of 1:1. Mandible to maxilla ratio was 4.1:1. All histologic types of OT occurred more in males except ameloblastic fibroma, adenomatoid odontogenic tumor (AOT), squamous odontogenic tumor (SOT), and myxoma. The age, gender, and site of tumor occurrence for different histologic types of odontogenic tumors are shown in Table II.

Group 1 (benign) tumors constituted 96.6% (1a, 66.6%; 1b, 17.6%; 1c, 12.4%) and group 2 (malignant) tumors constituted 3.4% of the odontogenic tumors. Ameloblastoma was the most frequent of group 1a tumors (94.8%), AOT was the most frequent of group 1b tumors (43%), and myxoma was the most frequent of group 1c tumors (52.5%). Ameloblastic carcinoma was the most common of malignant odontogenic tumors (Table I).

The most frequent odontogenic tumor was ameloblastoma (63%), followed by AOT (7.5%), myxoma (6.5%), calcifying odontogenic cyst (COC) (5.3%), odontogenic fibroma (OF) (5.3%), odontoma (2.5%), and ameloblastic carcinoma (2.2%). Other less common lesions are shown in Tables I and II.

The mean age (± SD) of patients with ameloblastoma was 31.7 ± 15.3 years (range, 4-82 years) with a peak incidence in the third decade (Tables I and II). Male to female ratio and mandible to maxilla ratios of 1.1:1 and 8.1:1, respectively, were found. The mean age (± SD) of patients with AOT (16.6 ± 5.7), ameloblastic fibroma (15.7 ± 3.0), and odontoma (22.3 ± 11.2) were significantly lower than those with ameloblastoma ($P < .05$). Table III compares the mean ages of ameloblastoma patients with those of other common histologic types.

Malignant odontogenic tumors occurred more in males than in females (7:4) and in the mandible more than the maxilla (8:3). Although the mean ages of patients with malignant odontogenic tumors (43.7 ± 22.4 years) and ameloblastic carcinoma (51.7 ± 24.9 years) were higher than those with benign odontogenic tumors (29.3 ± 14.9), no statistically significant difference was found ($P = .058$ and .055, respectively).

DISCUSSION

Available studies on the relative frequency of odontogenic tumors are mostly in non-Africans.[3,8-14] Odontogenic tumors are reported to be rare and it takes considerable time for any center to collect representative cases in sufficient numbers.[17] This may be the reason for relatively few reports on this heterogenous group of tumors, especially from Africa, with the exception of ameloblastoma. This report represents the largest series from an African environment.

Odontogenic tumors represented 9.6% of all the lesions of the oral cavity and the jaws seen in the present study. This is lower than a range of 15%-31% reported from the west African environment[4,5,16,18] but similar to that reported from South Africa (8.6%).[15] The similarity with the latter may be due to the fact that odontogenic tumors were considered as a percentage of all the biopsies, as done in the present study; whereas, the former[4,5,16,18] considered the odontogenic tumors as a percentage of all tumor and tumor-like lesions. Reports from North and South America,[8,10,11,14] however,

Table I. Age distribution of patients with odontogenic tumors (years)

Histologic Types	*0-10*	*11-20*	*21-30*	*31-40*	*41-50*	*51-60*	*61-70*	*71-80*	*81-85*	*Total (%)*
Group 1a										
Ameloblastoma	3	43	65	45	25	8	5	6	1	201 (63)
Squamous odontogenic tumor	0	1	0	2	3	0	0	0	0	6 (2)
Clacifying epithelial odontogenic tumor	0	2	3	0	0	0	0	0	0	5 (1.6)
Group 1b										
Ameloblastic fibroma	1	5	0	0	0	0	0	0	0	6 (2)
Odontoameloblastoma	0	0	0	0	1	0	0	0	0	1 (0.3)
Adenomatoid odonto genic tumor	3	17	3	1	0	0	0	0	0	24 (7.5)
Clacifying odonto genic cyst	0	4	7	4	2	0	0	0	0	17 (5.3)
Odontoma	1	4	1	1	1	0	0	0	0	8 (2.5)
Group 1c										
Odontogenic fibroma	1	6	3	3	3	0	0	1	0	17 (5.3)
Myxoma	1	9	6	1	1	1	1	1	0	21 (6.5)
Cementoblastoma	0	2	0	0	0	0	0	0	0	2 (0.6)
Group 2										
Ameloblastic carcinoma	0	1	1	1	0	1	2	0	1	7 (2.2)
Malignant ameloblastoma	0	0	0	1	0	0	0	0	0	1 (0.3)
Ameloblastic fibrodentinosarcoma	0	0	1	0	0	0	0	0	0	1 (0.3)
Ameloblastic fibro-odontosarcoma	0	0	0	1	0	0	0	0	0	1 (0.3)
Odontogenic carcinosarcoma	0	1	0	0	0	0	0	0	0	1 (0.3)
Total	10	92	91	62	36	10	8	8	2	319 (100)

suggest that odontogenic tumors are less frequently seen. The geographic variation in the incidence of these tumors may need further investigation.

Odontogenic tumors were most frequent in the second to fifth decade of life in this present series. This is similar to previous reports.[4,19] Malignant odontogenic tumors were seen as early as second decade of life in our series as previously reported.[5,19] This is in contrast to reports[4,10] that found malignant odontogenic tumors in the third decade of life and beyond.

This study confirms that benign tumors (96.6%) are the most frequently seen odontogenic tumor in agreement with most other reports.[3-5,8-11,13-16,18,19] Although some authors have reported that malignant odontogenic tumors are rare (0%-1.6%),[4,8-10] Odukoya[5] and Lu et al[19] have reported incidences of 5.2% and 6.1%, respectively. An incidence of 3.4% was found in the present study. Group 1a tumors constituted the most commonly seen tumors in the present series, in agreement with previous reports from Africa,[4,5,15,16] Hong Kong,[13] China,[19] and Turkey,[9] but in contrast to reports from the US,[11] Canada,[8] Chile,[14] and Mexico,[10] which reported group 1b as the most frequently diagnosed odontogenic tumors. The equal gender prevalence found in the present study is also similar to previous studies.[4,16,18] However, female preponderance was reported in Michigan[11] and Hong Kong.[13] Odukoya[5] in an earlier study from our center reported that odontogenic tumors were more common in males than in females. Although odontogenic tumors showed predilection for the mandible in this study, in agreement with previous reports,[4,5,16,18,19] AOT with predilection for the maxilla was an exception.

Ameloblastoma with predilection for the mandible was the most frequent OT (63%) in this study. This confirms the findings of other studies in Africa,[4,5,15,16,18] Hong Kong,[13] China,[19] and Turkey[9] but contrasts with reports from the US,[11] Canada,[8] Mexico,[10] and Chile,[14] where odontoma is reported to be the most prevalent OT. The higher male prevalence among those with ameloblastoma in this study is in agreement with many studies,[4,5,18,20,21] but in contrast with some reports.[3,9,11,16,22] Ameloblastoma was seen in all age groups in this study, unlike other histologic types, the youngest and oldest patients being in the first and ninth decade of life. This confirms the reports of earlier studies.[4,5,19]

Our finding that AOT is the second most frequent odontogenic tumor after ameloblastoma is in contrast with reports from Africa,[4,5,18] which reported that myxoma occurs more commonly than AOT. However, Asamoa et al[23] reported AOT as the most frequent pediatric odontogenic tumor in Nigeria. Studies from America also reported myxoma to be more frequent than AOT.[8,10,14] AOT showed predilection for the maxilla, unlike other histologic types of odontogenic tumors in this study, in agreement with other reports.[4,13,24,25] More females were affected than males in this study, in support of previous reports,[5,10,11,19,25] whereas

Table II. Distribution of different histologic types of odontogenic tumors according to age, gender, and site of tumor

Histologic type	Number (%)	Gender		Age range (years)	Mean ± SD (age)	Site		
		M	F			Man	Max	NS*
Ameloblastoma	201 (63)	106	95	4-82	31.7 ± 15.3	177	17	7
Squamous odontogenic tumor	6 (2)	0	6	20-46	38.2 ± 9.7	5	1	
Calcifying epithelial odontogenic tumor	5 (1.6)	5	0	14-28	21.3 ± 5.7	4	1	
Ameloblastic fibroma	6 (2)	1	5	10-18	15.7 ± 3.0	6	1	
Odontoameloblastoma	1 (0.3)		1	50	50	1	0	
Adenomatoid odontogenic Tumor	24 (7.5)	7	17	8-35	16.6 ± 5.7	10	13	1
Clacifying odontogenic cyst	17 (5.3)	11	6	14-50	28 ± 10.2	8	9	
Odontoma	8 (2.5)	4	4	10-45	22.3 ± 11.2	5	2	
Odontogenic fibroma	17 (5.3)	12	5	5-75	29.6 ± 17.2	10	7	
Myxoma	21 (6.5)	7	14	10-70	26.9 ± 16.4	13	7	1
Cementoblastoma	2 (0.6)	2	0	27	27	2	0	
Ameloblastic carcinoma	7 (2.2)	3	4	16-85	51.7 ± 24.9	5	2	
Malignant ameloblastoma	1 (0.3)	1	0	31	31	1	0	
Odontogenic fibrodentinosarcoma	1 (0.3)	1	0	28	28	1	0	
Ameloblastic fibro-odontosarcoma	1 (0.3)	1	0	35	35	0	1	
Odontogenic carcinosarcoma	1 (0.3)	1	0	25	25	1	0	

*NS, not specified.

Table III. Comparison of mean age of patients with ameloblastoma with other common odontogenic tumors

Test value = 31.67 (mean age of ameloblastoma)						
					95% confidence interval of the difference	
	t	df	Significance (2-tailed)	Mean difference	Lower	Upper
AOT	−12.808	23	.000*	−15.05	−17.47	−12.62
SOT	1.633	5	.163	6.50	−3.73	−16.72
OF	−.500	16	.624	−2.08	−10.91	6.75
Myxoma	−1.343	20	.194	−4.81	−12.29	2.66
Ameloblastic fibroma	−13.019	5	.000*	−16.00	−19.16	−12.84
Ameloblastic carcinoma	2.125	6	.078	20.04	−3.03	43.12
Odontoma	−2.380	7	.049*	−9.42	−18.78	−.06
COC	−1.432	16	.171	−3.55	−8.81	1.71

*Statistical significance.

Ochsenius et al[14] reported otherwise. Arotiba et al,[4] however, reported no sex predilection in their study. AOT occurred in relatively younger age group in conformity with previous studies.[5,10] Although attempt was recently made by Philipsen and Reichart[2] to reclassify AOT as a group 1a rather than group 1b (WHO classification) OT based on immunohistochemical reaction, this has not been universally accepted.

Myxoma has been reported to affect more females than males,[4,5,10,14] as confirmed in this series. An equal sex predilection was, however, reported by Lu et al.[19] Mandibular lesions were more frequent in the present study, unlike those reported elsewhere.[4,10,14]

Calcifying odontogenic cyst and odontogenic fibroma are relatively frequent lesions in this series, each accounting for 5.3% of OT. This is similar to reports by Daley et al,[8] Mosqueda-Taylor et al,[10] and Ochsenius et al.[14] Regarding gender distribution, males were affected more than females in this study, whereas others[10,14] reported that COC and OF have almost equal sex distribution.

Although odontomas are classified as group 1b tumors, many pathologists do not consider them as true odontogenic neoplasms but rather developmental malformations (hamartomas) of dental tissues.[26,27] Odontoma is a relatively rare lesion in the African environment,[4,5,15,16,18] as corroborated by the present series, unlike in America,[8,10,11,14] where it accounts for the majority of odontogenic tumors. Most odontomas are discovered on routine radiograph and do not produce clinical symptoms.[10] This may be responsible for the low incidence observed in African population, because

most patients in our environment do not seek medical consultation unless there are symptoms suggesting an obvious pathology. Genetic and/or environmental influences have also been suggested for the geographic variations.[14] Mandibular lesions were more commonly seen, with equal sex predilection, in the present study.

SOT and calcifying epithelial odontogenic cyst (CEOT) were exclusively diagnosed in females and males, respectively, with both having predilection for the mandible in this study. They represented 2% and 1.6% of all OT, respectively. The frequency of these neoplasms in other series[10,14,19] was even lower, confirming the rarity of these tumors.

Additional knowledge about malignant odontogenic tumors has accumulated after the second edition (1992) of the WHO classification, which prompted Eversole[28] to refine the classification. The tumor that retains features of ameloblastic differentiation and exhibits cytologic features of malignancy is termed *ameloblastic carcinoma* in Eversole's classification[28] and *malignant ameloblastoma* in the WHO classification.[7]

Malignant OT in our study represented 3.4% of the total OT, more cases of which were seen than odontomas and CEOT. Odukoya[5] and Lu et al[19] had earlier reported a higher frequency from Africa and Asia, respectively. However, reports from America[8,10,11,14] showed that they are very rare.

In conclusion, we observed some similarities between our studies and previous studies from Africa and Asia and some differences with the reports from the Americas. Ameloblastoma remains the most frequent odontogenic tumors in our environment, whereas odontoma is relative rare. Malignant odontogenic tumors are not uncommon lesions in our environment.

REFERENCES

1. Regezi JA, Sciuubba J. Oral pathology. Clinical-pathologic correlations. Philadelphia: Saunders; 1993. 362-97.
2. Philipsen HP, Reichart PA. Revision of the 1992 edition of the WHO histological typing of odontogenic tumours. A suggestion. J Oral Pathol Med 2002;31:253-8.
3. Ulmansky M, Lustmann J, Balkin N. Tumors and tumor-like lesions of the oral cavity and related structures in Israeli children. Int J Oral Maxillofac Surg 1999;28:291-4.
4. Arotiba JT, Ogunbiyi JO, Obiechina AE. Odontogenic tumours: a 15-year review from Ibadan, Nigeria. Br J Oral Maxillofac Surg 1997;35:363-7.
5. Odukoya OO. Odontogenic tumors: analysis of 289 Nigerian cases. J Oral Pathol Med 1995;24:454-7.
6. Pindborg JJ, Kramer IRH. WHO histological typing of odontogenic tumours, jaw cysts and allied lesions. 1st ed. Geneva: Springer-Verlag; 1971.
7. Kramer IRH, Pindborg JJ, Shear M. WHO histological typing of odontogenic tumours. 2nd ed. Geneva: Springer-Verlag; 1992.
8. Daley TM, Wysocki GP, Pringle GA. Relative incidence of odontogenic tumours and oral jaw cysts in a Canadian population. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1994;77:276-80.
9. Gunhan O, Erseven G, Ruacan S, et al. Odontogenic tumours: series of 409 cases. Aust Dent J 1990;35:518-22.
10. Mosqueda-Taylor A, Ledesma-Montes C, Caballero-Sandoval S, Portilla-Robertson J, Ruiz-Godoy Rivera LM, Meneses-Garcia A. Odontogenic tumors in Mexico: a collaborative retrospective study of 349 cases. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1997;84:672-5.
11. Regezi JA, Kerr DA, Courtney RM. Odontogenic tumours: analysis of 706 cases. J Oral Surg 1978;36:771-8.
12. Philipsen HP, Reichart PA, Praetorious F. Odontogenic tumours and odontomas. Consideration on interrelationship. Review of the literature and presentation of 134 new cases of odontomas. Oral Oncol 1997;33:86-99.
13. Wu PC, Chan KW. A survey of tumours of the jaw bone in Hong Kong Chinese 1963-1982. Br J Oral Maxillofac Surg 1985;23: 92-102.
14. Ochsenius G, Ortega A, Godoy L, Penafiel C, Escobar E. Odontogenic tumors in Chile: a study of 362 cases. J Oral Pathol Med 2002;31:415-20.
15. Chidzonga MM, Lopez VM, Alverez AP. Odontogenic tumours: analysis of 148 cases in Zimbabwe. Cent Afr J Med 1996;42: 158-61.
16. Mosadomi A. Odontogenic tumours in an African population. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1975;40: 502-21.
17. Smith CJ. Odontogenic neoplasms and harmatomas. In: Prabhu SR, Wilson DF, Daftary DK, Johnson NW. Oral Disease in the tropics. New York: Oxford University Press; 1992. p. 367-85.
18. Adebayo ET, Ajike SO, Adekeye EO. Odontogenic tumours in children and adolescent: a study of 78 Nigerian cases. J Craniomaxillofac Surg 2002;30:267-72.
19. Lu Y, Xuan M, Takata T, et al. Odontogenic tumors. A demographic study of 759 cases in a Chinese population. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1998;86:707-14.
20. Olaitan AA, Adeola DS, Adekeye EO. Ameloblastoma, clinical features and management of 315 cases from Kaduna, Nigeria. J Craniomaxillofac Surg 1993;21:351-5.
21. Olaitan AA, Adekeye EO. Clinical features and management of ameloblastoma of the mandible in children and adolescents. Br J Oral Maxillofac Surg 1996;34:248-51.
22. Mehlisch DR, Dahlin DC, Masson JK. Ameloblastoma: a clinicopathologic report. J Oral Surg 1972;30:9-22.
23. Asamoa EO, Ayanlere AO, Olaitan AA, Adekeye EO. Paediatric tumours of the jaws in Northern Nigeria. J Craniomaxillofac Surg 1990;18:130-5.
24. Arotiba GT. A study of orofacial tumours in Nigerian children. J Oral Maxillofac Surg 1996;54:34-8.
25. Arotiba GT, Arotiba JT, Olaitan AA, Ajayi OF. The adenomatoid odontogenic tumor: an analysis of 57 cases in a black African population. J Oral Maxillofac Surg 1997;55:149-50.
26. Cawson RA, Odell EW. Essentials of oral pathology and oral medicine. London: Churchill Livingstone; 1998. p.127-8.
27. Steve DB. Compound and complex odontomes. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1976;42:501-5.
28. Eversole LR. Malignant epithelial odontogenic tumors. Sem Diagn Pathol 1999;16:317-24.

Reprint requests:

Akinola Ladipo Ladeinde, BDS, FMCDS, FWACS
Department of Oral and Maxillofacial Surgery
College of Medicine
University of Lagos
P.M.B. 12003
Lagos, Nigeria
drakinladeinde@yahoo.com