

• 现场研究 •

河北省2008~2011年432例狂犬病病例分析

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摘要:目的 分析河北省2008~2011年狂犬病病例个案情况,探讨狂犬病防治中存在的问题,为狂犬病防制策略提供依据。方法 采用描述性流行病学方法对2008~2011年河北省狂犬病病例个案资料进行统计分析。结果 2008~2011年共收集432例狂犬病病例个案,全年每月均有病例发生,以3~9月份较多,占68.80%;男性多于女性,男女比例为2.57:1;病例以农民为主,占82.78%;41~60岁年龄组发病最多,占45.61%;其次分别是61~70岁和31~40岁年龄组。91.90%的病人通过犬感染,潜伏期中位数为59d。受伤部位以手部为主,占42.53%;其次是下肢膝以下和手臂。暴露部位越靠近头颈部,潜伏期越短。49.54%的病例暴露伤口未处理及33.56%的病人自行处理,88.89%的病人未接种狂犬疫苗;三级暴露者仅6.47%注射狂犬病人免疫球蛋白。结论 河北省狂犬病防制的重点仍在农村,加强狂犬病危害性及预防知识的宣传、及时就地规范处理暴露伤口和接种疫苗是防制狂犬病的有效措施。

关键词: 狂犬病; 个案调查; 分析

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Epidemiological characteristics of 432 rabies cases in Hebei Province from 2008 to 2011. WEI Ya-mei, ZHANG Yan-bo, HAN Zhan-ying, et al. (Hebei Center for Disease Control and Prevention, Shijiazhuang 050021, China, Corresponding author: LI Qi, E-mail: liqinew@yahoo.com.cn)

Abstract: Objective To analyze the epidemiological characteristics of rabies in Hebei province from 2008 to 2011 in order to provide scientific basis for prevention and treatment of rabies. **Methods** 432 cases of rabies in Hebei province from 2008 to 2011 were statistically analyzed with the descriptive epidemiological analysis. **Results** The results showed the cases were found in each month, but most occurred from March to September (68.80%). Male were more than female and most cases were farmers (82.78 %), 45.61% of cases were in the age group of 41 ~ 60 years. 91.90% of patients were infected through dogs, and median of latent period was 59 days. The injured sites were located mainly in hands (42.53%), lower limbs (17.43%) and arms (15.56%). The nearer the exposure sites to head and neck position, the shorter the latent period. 49.54% of case ere not treated after exposure, and 33.56% of patients by themselves. 88.89% of patients were not inoculated rabies vaccines, and only 6.47% of patients with exposure degree III were injected with HRIG. **Conclusion** The focus of the prevention and control of rabies is still in the rural areas in Hebei province. It is effective to promote the propaganda of public education including timely treatment of exposure wound and timely inculcation

Key words: Rabies; Case investigation; Analysis

为探讨河北省近年狂犬病流行规律,为有效制定防治对策提供科学依据,遂将2008~2011年全省各县区上报的狂犬病病例的个案调查资料进行流行病学分析,现将结果报告如下。

1 资料与方法

1.1 资料来源 2008~2011年河北省172个县(区)432份狂犬病流行病学个案调查资料。

1.2 方法 应用Excel工作表对以上资料进行管理,编制统计表,采用描述性流行病学方法对相关资料进行分析。

2 结果

2.1 流行季节 432例病例中发病时间明确的有391例,对其进行发病月份分析,每月均有病例发病,但以3~9月份较多,共269例,占68.80%;1、12月份病例较少,仅占9.72%(见图1)。

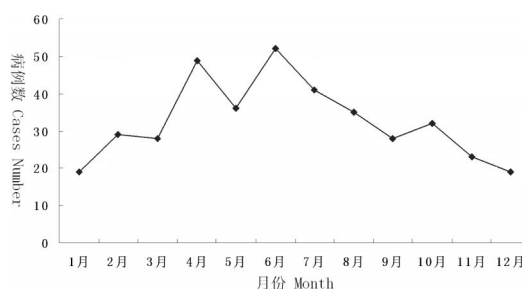


图1 河北省2008~2011年狂犬病病例时间分布情况

Fig 1 The time distribution of rabies cases in Hebei province from 2008 to 2011

2.2 流行人群 432例个案中,男311例,占71.99%;女121例,占28.01%;男女比例为2.57:1;职业以农民最多,占82.78%,其他职业所占比例较少。最小1岁,最大94岁。其中41~60岁占比例最高,占45.61%;其次分别是61~70岁和31~40岁分别占15.74%和12.50%;11~20岁年龄组最少,占5.79%(见表1)。

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表 1 不同性别年龄组人狂犬病病例分布

Tab 1 The distribution of rabies cases among different age and gender groups

年龄 Age	男性 Male		女性 Female		合计 Total	
	病例数 Case number	构成比 Proportion ratio	病例数 Case number	构成比 Proportion ratio	病例数 Case number	构成比 Proportion ratio
0~	18	5.79	10	8.27	28	6.48
11~	15	4.82	10	8.27	25	5.79
21~	25	8.04	4	3.31	29	6.71
31~	41	13.18	13	10.74	54	12.50
41~	82	26.36	16	13.22	98	22.68
51~	69	22.19	30	24.79	99	22.92
61~	43	13.83	25	20.66	68	15.74
>70	18	5.79	13	10.74	31	7.18
合计 Total	311	100.00	121	100.00	432	100.00

2.3 感染动物来源 432例病例中有397例通过犬感染,占91.90%,16例通过猫感染,占3.70%,感染动物不详的有19例。伤人动物以流浪和家养为主,分别占38.66%、37.96%;伤人以主动袭击为主,占47.22%(204/432),其次为嬉逗,占22.22%(96/432)。同时伤多人的有90例。

2.4 潜伏期 潜伏期中位数为59d。2个月内的占45.37%(194/432)(见表2)。

表 2 狂犬病病例潜伏期分析

Tab 2 The incubation period of rabies cases

潜伏期 Incubation period	病例数 Case number	构成比(%) Proportion ratio (%)	累计比(%) Proportion ratio (%)
15d以内 Within 15 d	38	8.80	8.80
一月以内 Within one month	64	14.81	23.61
2月以内 Within two month	94	21.76	45.37
半年以内 Within half year	114	26.39	71.76
一年以内 Within one year	38	8.80	80.56
一年以上 More than one year	46	10.64	91.20
不详 Not clear	38	8.80	100.00

2.5 受伤部位与受伤程度 受伤部位以手部为主,占42.53%,其次是下肢膝以下和手臂,分别占17.43%和15.56%(见表3)。两处及以上部位同时暴露的有39例,占到了所有病例的9.03%。暴露部位越靠近头颈部,潜伏期越短。Ⅲ级暴露有201例,占46.53%,其次是Ⅱ级暴露144例,占33.33%。Ⅰ级暴露有52例,占12.04%。

表 3 狂犬病病例暴露部位分析

Tab 3 The expose place of rabies cases

暴露部位 Expose place	病例数 Case number	构成比(%) Constituent ratio(%)	潜伏期中位数 Median
头面部 Head and face	53	11.00	23.5
颈部 Neck	5	1.04	29
躯干 Body	20	4.15	34
手臂 Arm	75	15.56	48
手部 Hand	205	42.53	61
下肢膝以上 Lower limb knee above	21	4.36	59
下肢膝以下 Lower limbs under knee	84	17.43	66
不详 Not clear	19	3.94	60
合计 Total	482	100	59

2.6 临床处理 432例狂犬病人中伤口未处理、自行处理和医疗机构处理分别占49.54%、33.56%和11.81%。全程接种、未全程接种和未接种狂犬疫苗的病例分别占2.78%、8.33%和88.89%;注射狂犬病人免疫球蛋白的病例为13例,占Ⅲ级暴露人数的6.47%。

3 讨论

河北省狂犬病全年各月均有病例发生,但以3~9月份较多,占68.80%。这可能与随着气温升高犬类活动频繁、易激惹,人们衣着单薄,肌体暴露部位多,外出活动较多,被动物咬抓伤机会增加有关^[1]。

狂犬病病例以男性和41~60岁年龄组为主,可能
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与该人群和狗接触多、喜欢逗狗有关。职业分布以农民为主,其主要原因是河北省为农业大省,农村人口占绝大多数,且近年农村养犬数量急剧增加、犬只缺乏有效管理和农民狂犬病防治意识淡薄。432例病例中有91.90%通过犬感染,82.87%因咬伤而致病。伤人动物以流浪和家养为主,提示犬仍是中国目前主要的狂犬病宿主动物,应加强犬只等动物的免疫,提高免疫接种率,同时应加大犬只管理、捕杀无证犬只的力度。

通过对432例狂犬病流行病学分析表明潜伏期随着暴露部位离头部的距离增加而延长。吴中发等对赣州市狂犬病疫情与监测的分析时也得出同样结论^[2]。

432个狂犬病病例中,88.89%的病例没有接种狂犬疫苗,49.54%的病人伤口没有处理,提示人们对狂犬病认识仍然不足,对暴露后接种狂犬病疫苗的必要性也缺乏认识,这提示应进一步加大狂犬病防治知识的宣传教育。另外,狂犬病暴露后处置的高额费用也是防治工作中需要关注的一个问题,暴露后接种狂犬病疫苗要300元左右,Ⅲ级暴露接种狂犬病免疫球蛋白则动辄上千元^[3],高额的费用使部分低收入群体难以承受。未全程接种者占病例数的8.33%,其主要原因是该病潜伏期短于全程接种疫苗所需时间,表明与犬类动物接触较多的人群,应开展预防性的狂犬疫苗

接种,2.78%的病例虽已全程接种了疫苗,仍未获得保护,其原因与伤口处理、狂犬病人免疫球蛋白使用和疫苗的保存、质量等因素有关,与资料报道相似^[4]。

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